Method for distinguishing AML-specific FLT3 length mutations from TKD mutations

The present invention is directed to a method for distinguishing AML-specific FLT3 length mutations from TKD mutations by determining the expression level of selected marker genes.

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Leukemias are classified into four different groups or types: acute myeloid (AML), acute lymphatic (ALL), chronic myeloid (CML) and chronic lymphatic leukemia (CLL). Within these groups, several subcategories can be identified further using a panel of standard techniques as described below. These different subcategories in leukemias are associated with varying clinical outcome and therefore are the basis for different treatment strategies. The importance of highly specific classification may be illustrated in detail further for the AML as a very heterogeneous group of diseases. Effort is aimed at identifying biological entities and to distinguish and classify subgroups of AML which are associated with a favorable, intermediate or unfavorable prognosis, respectively. In 1976, the FAB classification was proposed by the French-American-British co-operative group which was based on cytomorphology and cytochemistry in order to separate AML subgroups according to the morphological appearance of blasts in the blood and bone marrow. In addition, it was recognized that genetic abnormalities occurring in the leukemic blast had a major impact on the morphological picture and even more on the prognosis. So far, the karyotype of the leukemic blasts is the most important independent prognostic factor regarding response to therapy as well as survival.

Usually, a combination of methods is necessary to obtain the most important information in leukemia diagnostics: Analysis of the morphology and cytochemistry of bone marrow blasts and peripheral blood cells is necessary to establish the diagnosis. In some cases the addition of immunophenotyping is mandatory to separate very undifferentiated AML from acute lymphoblastic leukemia and CLL. Leukemia subtypes investigated can be diagnosed by cytomorphology alone, only if an expert reviews the smears. However, a genetic analysis based on chromosome analysis, fluorescence in situ hybridization or RT-PCR and immunophenotyping is required in order to assign all cases into the right category. The aim of these techniques besides diagnosis is mainly to determine the

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prognosis of the leukemia. A major disadvantage of these methods, however, is that viable cells are necessary as the cells for genetic analysis have to divide in vitro in order to obtain metaphases for the analysis. Another problem is the long time of 72 hours from receipt of the material in the laboratory to obtain the result. Furthermore, great experience in preparation of chromosomes and even more in analyzing the karyotypes is required to obtain the correct result in at least 90% of cases. Using these techniques in combination, hematological malignancies in a first approach are separated into chronic myeloid leukemia (CML), chronic lymphatic (CLL), acute lymphoblastic (ALL), and acute myeloid leukemia (AML). Within the latter three disease entities several prognostically relevant subtypes have been established. As a second approach this further sub-classification is based mainly on genetic abnormalities of the leukemic blasts and clearly is associated with different prognoses.

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The sub-classification of leukemias becomes increasingly important to guide therapy. The development of new, specific drugs and treatment approaches requires the identification of specific subtypes that may benefit from a distinct therapeutic protocol and, thus, can improve outcome of distinct subsets of leukemia. For example, the new therapeutic drug (STI571, Imatinib) inhibits the CML specific chimeric tyrosine kinase BCR-ABL generated from the genetic defect observed in CML, the BCR-ABL-rearrangement due to the translocation between chromosomes 9 and 22 (t(9;22) (q34; q11)). In patients treated with this new drug, the therapy response is dramatically higher as compared to all other drugs that had been used so far. Another example is the subtype of acute myeloid leukemia AML M3 and its variant M3v both with karyotype t(15;17)(q22; q11-12). The introduction of a new drug (all-trans retinoic acid - ATRA) has improved the outcome in this subgroup of patients from about 50% to 85 % long-term survivors. As it is mandatory for these patients suffering from these specific leukemia subtypes to be identified as fast as possible so that the best therapy can be applied, diagnostics today must accomplish sub-classification with maximal precision. Not only for these subtypes but also for several other leukemia subtypes different treatment approaches could improve outcome. Therefore, rapid and precise identification of distinct leukemia subtypes is the future goal for diagnostics.

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Thus, the technical problem underlying the present invention was to provide means for leukemia diagnostics which overcome at least some of the disadvantages of the prior art diagnostic methods, in particular encompassing the time-consuming and unreliable combination of different methods and which provides a rapid assay to unambiguously distinguish one AML subtype from another, e.g. by genetic analysis.

According to Golub et al. (Science, 1999, 286, 531-7), gene expression profiles can be used for class prediction and discriminating AML from ALL samples. However, for the analysis of acute leukemias the selection of the two different subgroups was performed using exclusively morphologic-phenotypical criteria. This was only descriptive and does not provide deeper insights into the pathogenesis or the underlying biology of the leukemia. The approach reproduces only very basic knowledge of cytomorphology and intends to differentiate classes. The data is not sufficient to predict prognostically relevant cytogenetic aberrations.

Furthermore, the international application WO-A 03/039443 discloses marker genes the expression levels of which are characteristic for certain leukemia, e.g. AML subtypes and additionally discloses methods for differentiating between the subtype of AML cells by determining the expression profile of the disclosed marker genes. However, WO-A 03/039443 does not provide guidance which set of distinct genes discriminate between two subtypes and, as such, can be routineously taken in order to distinguish one AML subtype from another.

The problem is solved by the present invention, which provides a method for distinguishing AML-specific FLT3 length mutations from TKD mutations in a sample, the method comprising determining the expression level of markers selected from the markers identifiable by their Affymetrix Identification Numbers (affy ID) as defined in Tables 1, and/or 2,

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.1 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.1 having a positive fc value,

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is indicative for the presence of AML_D835 when AML_D835 is distinguished from all other subtypes,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.2 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.2 having a positive fc value,

is indicative for the presence of AML_Double when AML_Double is distinguished from all other subtypes,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.3 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.3 having a positive fc value,

is indicative for the presence of AML_Status-1 when AML_Status-1 is distinguished from all other subtypes,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.4 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.4 having a positive fc value, is indicative for the presence of AML_Status-2 when AML_Status-2 is

distinguished from all other subtypes,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.5 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.5 having a positive fc value, is indicative for the presence of AML_Status-3 when AML_Status-3 is distinguished from all other subtypes,

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and/or wherein

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distinguished from all other subtypes,

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.6 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.6 having a positive fc value, is indicative for the presence of AML_Status-4 when AML_Status-4 is

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.7 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.7 having a positive fc value, is indicative for the presence of AML_Status-5 when AML_Status-5 is distinguished from all other subtypes,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.8 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 1.8 having a positive fc value, is indicative for the presence of AML_normal when AML_normal is distinguished from all other subtypes,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.1 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.1 having a positive fc value, is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_Double,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.2 having a negative fc value, and/or

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a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.2 having a positive fc value, is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_Status-1,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.3 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.3 having a positive fc value, is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_Status-2,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.4 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.4 having a positive fc value, is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_Status-3,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.5 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.5 having a positive fc value, is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_Status-4,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.6 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.6 having a positive fc value,

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is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_Status-5,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.7 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.7 having a positive fc value, is indicative for the presence of AML_D835 when AML_D835 is distinguished from AML_normal,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.8 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.8 having a positive fc value, is indicative for the presence of AML_Double when AML_Double is distinguished from AML_Status-1,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.9 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.9 having a positive fc value, is indicative for the presence of AML_Double when AML_Double is distinguished from AML_Status-2,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.10 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.10 having a positive fc value, is indicative for the presence of AML_Double when AML_Double is distinguished from AML_Status-3,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.11 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.11 having a positive fc value, is indicative for the presence of AML_Double when AML_Double is distinguished from AML_Status-4,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.12 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.12 having a positive fc value, is indicative for the presence of AML_Double when AML_Double is distinguished from AML_Status-5,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.13 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.13 having a positive fc value, is indicative for the presence of AML_Double when AML_Double is distinguished from AML_normal,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.14 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.14 having a positive fc value, is indicative for the presence of AML_Status-1 when AML_Status-1 is distinguished from AML_Status-2,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.15 having a negative fc value, and/or

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a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.15 having a positive fc value, is indicative for the presence of AML_Status-1 when AML_Status-1 is distinguished from AML_Status-3,

5 and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.16 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.16 having a positive fc value,

is indicative for the presence of AML_Status-1 when AML_Status-1 is distinguished from AML_Status-4,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.17 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.17 having a positive fc value,

is indicative for the presence of AML_Status-1 when AML_Status-1 is distinguished from AML_Status-5,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.18 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.18 having a positive fc value,

is indicative for the presence of AML_Status-1 when AML_Status-1 is distinguished from AML_normal,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.19 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.19 having a positive fc value,

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is indicative for the presence of AML_Status-2 when AML_Status-2 is distinguished from AML_Status-3,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.20 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.20 having a positive fc value, is indicative for the presence of AML_Status-2 when AML_Status-2 is distinguished from AML_Status-4,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.21 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.21 having a positive fc value, is indicative for the presence of AML_Status-2 when AML_Status-2 is distinguished from AML_Status-5,

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and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.22 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.22 having a positive fc value, is indicative for the presence of AML_Status-2 when AML_Status-2 is distinguished from AML_normal,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.23 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.23 having a positive fc value, is indicative for the presence of AML_Status-3 when AML_Status-3 is distinguished from AML_Status-4,

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and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.24 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.24 having a positive fc value, is indicative for the presence of AML_Status-3 when AML_Status-3 is distinguished from AML_Status-5,

and/or wherein

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a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.25 having a negative fc value, and/or a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.25 having a positive fc value, is indicative for the presence of AML. Status 3 when AML. Status 3 is

is indicative for the presence of AML_Status-3 when AML_Status-3 is distinguished from AML_normal,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.26 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.26 having a positive fc value,

is indicative for the presence of AML_Status-4 when AML_Status-4 is distinguished from AML_Status-5,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.27 having a negative fc value, and/or

a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.27 having a positive fc value,

is indicative for the presence of AML_Status-4 when AML_Status-4 is distinguished from AML_normal,

and/or wherein

a lower expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.28 having a negative fc value, and/or

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a higher expression of at least one polynucleotide defined by at least one of the numbers 1 to 50 of Table 2.28 having a positive fc value,

is indicative for the presence of AML_Status-5 when AML_Status-5 is distinguished from AML_normal.

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FLT3 stands for FMS-like tyrosine kinase 3. TKD stand for tyrosin kinase domain of FLT3.

Two mayor types of mutations in the FLT3-Gene have been described.

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- 1) Length mutations in the juxtamembrane domain (FLT3-LM, status 1, 2, 3, 4, 5)
- 2) point mutations in codons D835 or I836 or deletions of I836 in the tyrosine kinase domain (all coded as D835, refers to TKD mutation).
- 3) "Double" means that both types of mutations were found in a single patient.

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As used herein, the abbreviations used above apply for the following AML subtypes (see Also Example 1):

- 1) AML_normal (normal karyotype) and no FLT3 mutation,
- 2) AML_status 1: FLT3-LM/WT (wildtype) ratio <0.3,

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- 3) AML_status 2: ratio 0.7-1.1,
- 4) AML status 3: ratio of >1.2=partial loss of WT (wild type),
- 5) AML_status 4: total loss of WT,
- 6) AML status 5: two or more low status mutations
- 7) AML_D835: D835/TKD mutation (mutation in the tyrosine kinase domain of FLT3)
- 8) AML_Double: mutations D835/TKD and FLT3-LM

As used herein, "all other subtypes" refer to the subtypes of the present invention, i.e. if one subtype is distinguished from "all other subtypes", it is distinguished from all other subtypes contained in the present invention.

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According to the present invention, a "sample" means any biological material containing genetic information in the form of nucleic acids or proteins obtainable or obtained from an individual. The sample includes e.g. tissue samples, cell

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samples, bone marrow and/or body fluids such as blood, saliva, semen. Preferably, the sample is blood or bone marrow, more preferably the sample is bone marrow. The person skilled in the art is aware of methods, how to isolate nucleic acids and proteins from a sample. A general method for isolating and preparing nucleic acids from a sample is outlined in Example 3.

According to the present invention, the term "lower expression" is generally assigned to all by numbers and Affymetrix ID. definable polynucleotides the t-values and fold change (fc) values of which are negative, as indicated in the Tables. Accordingly, the term "higher expression" is generally assigned to all by numbers and Affymetrix ID. definable polynucleotides the t-values and fold change (fc) values of which are positive.

According to the present invention, the term "expression" refers to the process by which mRNA or a polypeptide is produced based on the nucleic acid sequence of a gene, i.e. "expression" also includes the formation of mRNA upon transcription. In accordance with the present invention, the term "determining the expression level" preferably refers to the determination of the level of expression, namely of the markers.

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Generally, "marker" refers to any genetically controlled difference which can be used in the genetic analysis of a test versus a control sample, for the purpose of assigning the sample to a defined genotype or phenotype. As used herein, "markers" refer to genes which are differentially expressed in, e.g., different AML subtypes. The markers can be defined by their gene symbol name, their encoded protein name, their transcript identification number (cluster identification number), the data base accession number, public accession number or GenBank identifier or, as done in the present invention, Affymetrix identification number, chromosomal location, UniGene accession number and cluster type, LocusLink accession number (see Examples and Tables).

The Affymetrix identification number (affy ID) is accessible for anyone and the person skilled in the art by entering the "gene expression omnibus" internet page of the National Center for Biotechnology Information (NCBI)

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(http://www.ncbi.nlm.nih.gov/geo/). In particular, the affy ID's of the polynucleotides used for the method of the present invention are derived from the so-called U133 chip. The sequence data of each identification number can be viewed at http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL96

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Generally, the expression level of a marker is determined by the determining the expression of its corresponding "polynucleotide" as described hereinafter.

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According to the present invention, the term "polynucleotide" refers, generally, to a DNA, in particular cDNA, or RNA, in particular a cRNA, or a portion thereof or a polypeptide or a portion thereof. In the case of RNA (or cDNA), the polynucleotide is formed upon transcription of a nucleotide sequence which is capable of expression. The polynucleotide fragments refer to fragments preferably of between at least 8, such as 10, 12, 15 or 18 nucleotides and at least 50, such as 60, 80, 100, 200 or 300 nucleotides in length, or a complementary sequence thereto, representing a consecutive stretch of nucleotides of a gene, cDNA or mRNA. In other terms, polynucleotides include also any fragment (or complementary sequence thereto) of a sequence derived from any of the markers defined above as long as these fragments unambiguously identify the marker.

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The determination of the expression level may be effected at the transcriptional or translational level, i.e. at the level of mRNA or at the protein level. Protein fragments such as peptides or polypeptides advantageously comprise between at least 6 and at least 25, such as 30, 40, 80, 100 or 200 consecutive amino acids representative of the corresponding full length protein. Six amino acids are generally recognized as the lowest peptidic stretch giving rise to a linear epitope recognized by an antibody, fragment or derivative thereof. Alternatively, the proteins or fragments thereof may be analysed using nucleic acid molecules specifically binding to three-dimensional structures (aptamers).

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Depending on the nature of the polynucleotide or polypeptide, the determination of the expression levels may be effected by a variety of methods. For determining and detecting the expression level, it is preferred in the present invention that the polynucleotide, in particular the cRNA, is labelled. 5

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The labelling of the polynucleotide or a polypeptide can occur by a variety of methods known to the skilled artisan. The label can be fluorescent, chemiluminescent, bioluminescent, radioactive (such as ³H or ³²P). The labelling compound can be any labelling compound being suitable for the labelling of polynucleotides and/or polypeptides. Examples include fluorescent dyes, such as fluorescein, dichlorofluorescein, hexachlorofluorescein, BODIPY variants, ROX, tetramethylrhodamin, rhodamin X, Cyanine-2, Cyanine-3, Cyanine-5, Cyanine-7, IRD40, FluorX, Oregon Green, Alexa variants (available e.g. from Molecular Probes or Amersham Biosciences) and the like, biotin or biotinylated nucleotides, digoxigenin, radioisotopes, antibodies, enzymes and receptors. Depending on the type of labelling, the detection is done via fluorescence measurements, conjugation to streptavidin and/or avidin, antigen-antibody- and/or antibody-antibodyinteractions, radioactivity measurements, as well as catalytic and/or receptor/ligand interactions. Suitable methods include the direct labelling (incorporation) method, the amino-modified (amino-allyl) nucleotide method (available e.g. from Ambion), and the primer tagging method (DNA dendrimer labelling, as kit available e.g. from Genisphere). Particularly preferred for the present invention is the use of biotin or biotinylated nucleotides for labelling, with the latter being directly incorporated into, e.g. the cRNA polynucleotide by in vitro transcription.

If the polynucleotide is mRNA, cDNA may be prepared into which a detectable label, as exemplified above, is incorporated. Said detectably labelled cDNA, in single-stranded form, may then be hybridised, preferably under stringent or highly stringent conditions to a panel of single-stranded oligonucleotides representing different genes and affixed to a solid support such as a chip. Upon applying appropriate washing steps, those cDNAs will be detected or quantitatively detected that have a counterpart in the oligonucleotide panel. Various advantageous embodiments of this general method are feasible. For example, the mRNA or the cDNA may be amplified e.g. by polymerase chain reaction, wherein it is preferable, for quantitative assessments, that the number of amplified copies corresponds relative to further amplified mRNAs or cDNAs to the number of mRNAs originally present in the cell. In a preferred embodiment of the present invention, the cDNAs are transcribed into cRNAs prior to the hybridisation step wherein only in the transcription step a label is incorporated into the nucleic acid

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and wherein the cRNA is employed for hybridisation. Alternatively, the label may be attached subsequent to the transcription step.

Similarly, proteins from a cell or tissue under investigation may be contacted with a panel of aptamers or of antibodies or fragments or derivatives thereof. The antibodies etc. may be affixed to a solid support such as a chip. Binding of proteins indicative of an AML subtype may be verified by binding to a detectably labelled secondary antibody or aptamer. For the labelling of antibodies, it is referred to Harlow and Lane, "Antibodies, a laboratory manual", CSH Press, 1988, Cold Spring Harbor. Specifically, a minimum set of proteins necessary for diagnosis of all AML subtypes may be selected for creation of a protein array system to make diagnosis on a protein lysate of a diagnostic bone marrow sample directly. Protein Array Systems for the detection of specific protein expression profiles already are available (for example: Bio-Plex, BIORAD, München, Germany). For this application preferably antibodies against the proteins have to be produced and immobilized on a platform e.g. glasslides or microtiterplates. The immobilized antibodies can be labelled with a reactant specific for the certain target proteins as discussed above. The reactants can include enzyme substrates, DNA, receptors, antigens or antibodies to create for example a capture sandwich immunoassay.

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For reliably distinguishing AML-specific FLT3 length mutations from TKD mutations it is useful that the expression of more than one of the above defined markers is determined. As a criterion for the choice of markers, the statistical significance of markers as expressed in q or p values based on the concept of the false discovery rate is determined. In doing so, a measure of statistical significance called the q value is associated with each tested feature. The q value is similar to the p value, except it is a measure of significance in terms of the false discovery rate rather than the false positive rate (Storey JD and Tibshirani R. Proc.Natl.Acad.Sci., 2003, Vol. 100:9440-5.

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In a preferred embodiment of the present invention, markers as defined in Tables 1-2 having a q-value of less than, 3E-02, less than 3E-06, more preferred less than 1.5E-09, most preferred less than 1.5E-11, less than 1.5E-20, less than 1.5E-30, are measured.

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Of the above defined markers, the expression level of at least two, preferably of at least ten, more preferably of at least 25, most preferably of 50 of at least one of the Tables of the markers is determined.

In another preferred embodiment, the expression level of at least 2, of at least 5, of at least 10 out of the markers having the numbers 1 - 10, 1-20, 1-40, 1-50 of at least one of the Tables are measured.

The level of the expression of the "marker", i.e. the expression of the polynucleotide is indicative of the AML subtype of a cell or an organism. The level of expression of a marker or group of markers is measured and is compared with the level of expression of the same marker or the same group of markers from other cells or samples. The comparison may be effected in an actual experiment or in silico. When the expression level also referred to as expression pattern or expression signature (expression profile) is measurably different, there is according to the invention a meaningful difference in the level of expression. Preferably the difference at least is 5 %, 10% or 20%, more preferred at least 50% or may even be as high as 75% or 100%. More preferred the difference in the level of expression is at least 200%, i.e. two fold, at least 500%, i.e. five fold, or at least 1000%, i.e. 10 fold.

Accordingly, the expression level of markers expressed lower in a first subtype than in at least one second subtype, which differs from the first subtype, is at least 5 %, 10% or 20%, more preferred at least 50% or may even be 75% or 100%, i.e. 2-fold lower, preferably at least 10-fold, more preferably at least 50-fold, and most preferably at least 100-fold lower in the first subtype. On the other hand, the expression level of markers expressed higher in a first subtype than in at least one second subtype, which differs from the first subtype, is at least 5 %, 10% or 20%, more preferred at least 50% or may even be 75% or 100%, i.e. 2-fold higher, preferably at least 10-fold, more preferably at least 50-fold, and most preferably at least 100-fold higher in the first subtype.

In another embodiment of the present invention, the sample is derived from an individual having leukemia, preferably AML.

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For the method of the present invention it is preferred if the polynucleotide the expression level of which is determined is in form of a transcribed polynucleotide. A particularly preferred transcribed polynucleotide is an mRNA, a cDNA and/or a cRNA, with the latter being preferred. Transcribed polynucleotides are isolated from a sample, reverse transcribed and/or amplified, and labelled, by employing methods well-known the person skilled in the art (see Example 3). In a preferred embodiment of the methods according to the invention, the step of determining the expression profile further comprises amplifying the transcribed polynucleotide.

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In order to determine the expression level of the transcribed polynucleotide by the method of the present invention, it is preferred that the method comprises hybridizing the transcribed polynucleotide to a complementary polynucleotide, or a portion thereof, under stringent hybridization conditions, as described hereinafter.

The term "hybridizing" means hybridization under conventional hybridization conditions, preferably under stringent conditions as described, for example, in Sambrook, J., et al., in "Molecular Cloning: A Laboratory Manual" (1989), Eds. J. Sambrook, E. F. Fritsch and T. Maniatis, Cold Spring Harbour Laboratory Press, Cold Spring Harbour, NY and the further definitions provided above. Such conditions are, for example, hybridization in 6x SSC, pH 7.0 / 0.1% SDS at about 45°C for 18-23 hours, followed by a washing step with 2x SSC/0.1% SDS at 50°C. In order to select the stringency, the salt concentration in the washing step can for example be chosen between 2x SSC/0.1% SDS at room temperature for low stringency and 0.2x SSC/0.1% SDS at 50°C for high stringency. In addition, the temperature of the washing step can be varied between room temperature, ca. 22°C, for low stringency, and 65°C to 70° C for high stringency. Also contemplated are polynucleotides that hybridize at lower stringency hybridization conditions. Changes in the stringency of hybridization and signal detection are primarily accomplished through the manipulation, preferably of formamide concentration (lower percentages of formamide result in lowered stringency), salt conditions, or temperature. For example, lower stringency conditions include an overnight incubation at 37°C in a solution comprising 6X SSPE (20X SSPE = 3M NaCl; 0.2M NaH2PO4; 0.02M EDTA, pH 7.4), 0.5% SDS, 30% formamide, 100 mg/ml salmon sperm blocking DNA, followed by washes at 50°C with 1 X SSPE, 0.1% SDS. In addition, to achieve even lower stringency, washes performed following stringent hybridization can be done at higher salt concentrations (e.g. 5x SSC). Variations in the above conditions may be accomplished through the inclusion

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and/or substitution of alternate blocking reagents used to suppress background in hybridization experiments. The inclusion of specific blocking reagents may require modification of the hybridization conditions described above, due to problems with compatibility.

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"Complementary" and "complementarity", respectively, can be described by the percentage, i.e. proportion, of nucleotides which can form base pairs between two polynucleotide strands or within a specific region or domain of the two strands. Generally, complementary nucleotides are, according to the base pairing rules, adenine and thymine (or adenine and uracil), and cytosine and guanine. Complementarity may be partial, in which only some of the nucleic acids' bases are matched according to the base pairing rules. Or, there may be a complete or total complementarity between the nucleic acids. The degree of complementarity between nucleic acid strands has effects on the efficiency and strength of hybridization between nucleic acid strands.

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Two nucleic acid strands are considered to be 100% complementary to each other over a defined length if in a defined region all adenines of a first strand can pair with a thymine (or an uracil) of a second strand, all guanines of a first strand can pair with a cytosine of a second strand, all thymine (or uracils) of a first strand can pair with an adenine of a second strand, and all cytosines of a first strand can pair with a guanine of a second strand, and vice versa. According to the present invention, the degree of complementarity is determined over a stretch of 20, preferably 25, nucleotides, i.e. a 60% complementarity means that within a region of 20 nucleotides of two nucleic acid strands 12 nucleotides of the first strand can base pair with 12 nucleotides of the second strand according to the above ruling, either as a stretch of 12 contiguous nucleotides or interspersed by non-pairing nucleotides, when the two strands are attached to each other over said region of 20 nucleotides. The degree of complementarity can range from at least about 50% to full, i.e. 100% complementarity. Two single nucleic acid strands are said to be "substantially complementary" when they are at least about 80% complementary, preferably about 90% or higher. For carrying out the method of the present invention substantial complementarity is preferred.

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Preferred methods for detection and quantification of the amount of polynucleotides, i.e. for the methods according to the invention allowing the determination of the level of expression of a marker, are those described by

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Sambrook et al. (1989) or real time methods known in the art as the TaqMan® method disclosed in WO92/02638 and the corresponding U.S. 5,210,015, U.S. 5,804,375, U.S. 5,487,972. This method exploits the exonuclease activity of a polymerase to generate a signal. In detail, the (at least one) target nucleic acid component is detected by a process comprising contacting the sample with an oligonucleotide containing a sequence complementary to a region of the target nucleic acid component and a labeled oligonucleotide containing a sequence complementary to a second region of the same target nucleic acid component sequence strand, but not including the nucleic acid sequence defined by the first oligonucleotide, to create a mixture of duplexes during hybridization conditions, wherein the duplexes comprise the target nucleic acid annealed to the first oligonucleotide and to the labeled oligonucleotide such that the 3'-end of the first oligonucleotide is adjacent to the 5'-end of the labeled oligonucleotide. Then this mixture is treated with a template-dependent nucleic acid polymerase having a 5' to 3' nuclease activity under conditions sufficient to permit the 5' to 3' nuclease activity of the polymerase to cleave the annealed, labeled oligonucleotide and release labeled fragments. The signal generated by the hydrolysis of the labeled oligonucleotide is detected and/ or measured. TaqMan® technology eliminates the need for a solid phase bound reaction complex to be formed and made detectable. Other methods include e.g. fluorescence resonance energy transfer between two adjacently hybridized probes as used in the LightCycler® format described in U.S. 6,174,670.

A preferred protocol if the marker, i.e. the polynucleotide, is in form of a transcribed nucleotide, is described in Example 3, where total RNA is isolated, cDNA and, subsequently, cRNA is synthesized and biotin is incorporated during the transcription reaction. The purified cRNA is applied to commercially available arrays which can be obtained e.g. from Affymetrix. The hybridized cRNA is detected according to the methods described in Example 3. The arrays are produced by photolithography or other methods known to experts skilled in the art e.g. from U.S. 5,445,934, U.S. 5,744,305, U.S. 5,700,637, U.S. 5,945,334 and EP 0 619 321 or EP 0 373 203, or as decribed hereinafter in greater detail.

In another embodiment of the present invention, the polynucleotide or at least one of the polynucleotides is in form of a polypeptide. In another preferred embodiment, the expression level of the polynucleotides or polypeptides is detected

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using a compound which specifically binds to the polynucleotide of the polypeptide of the present invention.

As used herein, "specifically binding" means that the compound is capable of discriminating between two or more polynucleotides or polypeptides, i.e. it binds to the desired polynucleotide or polypeptide, but essentially does not bind unspecifically to a different polynucleotide or polypeptide.

The compound can be an antibody, or a fragment thereof, an enzyme, a so-called small molecule compound, a protein-scaffold, preferably an anticalin. In a preferred embodiment, the compound specifically binding to the polynucleotide or polypeptide is an antibody, or a fragment thereof.

As used herein, an "antibody" comprises monoclonal antibodies as first described by Köhler and Milstein in Nature 278 (1975), 495-497 as well as polyclonal antibodies, i.e. antibodies contained in a polyclonal antiserum. Monoclonal antibodies include those produced by transgenic mice. Fragments of antibodies include ScFvs, chimeric and humanized antibodies. See, for example Harlow and Lane, loc. cit. For the detection of polypeptides using antibodies or fragments thereof, the person skilled in the art is aware of a variety of methods, all of which are included in the present invention. Examples include immunoprecipitation, Western blotting, Enzyme-linked immuno sorbent assay (ELISA), Enzyme-linked immuno sorbent assay (RIA), dissociation-enhanced lanthanide fluoro immuno assay (DELFIA), scintillation proximity assay (SPA). For detection, it is desirable if the antibody is labelled by one of the labelling compounds and methods described supra.

In another preferred embodiment of the present invention, the method for distinguishing AML-specific FLT3 length mutations from TKD mutations is carried out on an array.

In general, an "array" or "microarray" refers to a linear or two- or three dimensional arrangement of preferably discrete nucleic acid or polypeptide probes which comprises an intentionally created collection of nucleic acid or polypeptide probes of any length spotted onto a substrate/solid support. The person skilled in

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the art knows a collection of nucleic acids or polypeptide spotted onto a substrate/solid support also under the term "array". As known to the person skilled in the art, a microarray usually refers to a miniaturised array arrangement, with the probes being attached to a density of at least about 10, 20, 50, 100 nucleic acid molecules referring to different or the same genes per cm². Furthermore, where appropriate an array can be referred to as "gene chip". The array itself can have different formats, e.g. libraries of soluble probes or libraries of probes tethered to resin beads, silica chips, or other solid supports.

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The process of array fabrication is well-known to the person skilled in the art. In the following, the process for preparing a nucleic acid array is described. Commonly, the process comprises preparing a glass (or other) slide (e.g. chemical treatment of the glass to enhance binding of the nucleic acid probes to the glass surface), obtaining DNA sequences representing genes of a genome of interest, and spotting sequences these sequences of interest onto glass slide. Sequences of interest can be obtained via creating a cDNA library from an mRNA source or by using publicly available databases, such as GeneBank, to annotate the sequence information of custom cDNA libraries or to identify cDNA clones from previously prepared libraries. Generally, it is recommendable to amplify obtained sequences by PCR in order to have sufficient amounts of DNA to print on the array. The liquid containing the amplified probes can be deposited on the array by using a set of microspotting pins. Ideally, the amount deposited should be uniform. The process can further include UV-crosslinking in order to enhance immobilization of the probes on the array.

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In a preferred embodiment, the array is a high density oligonucleotide (oligo) array using a light-directed chemical synthesis process, employing the so-called photolithography technology. Unlike common cDNA arrays, oligo arrays (according to the Affymetrix technology) use a single-dye technology. Given the sequence information of the markers, the sequence can be synthesized directly onto the array, thus, bypassing the need for physical intermediates, such as PCR products, required for making cDNA arrays. For this purpose, the marker, or partial sequences thereof, can be represented by 14 to 20 features, preferably by less than 14 features, more preferably less than 10 features, even more preferably by 6 features or less, with each feature being a short sequence of nucleotides (oligonucleotide), which is a perfect match (PM) to a segment of the respective gene. The PM oligonucleotide are paired with mismatch (MM) oligonucleotides

which have a single mismatch at the central base of the nucleotide and are used as "controls". The chip exposure sites are defined by masks and are deprotected by the use of light, followed by a chemical coupling step resulting in the synthesis of one nucleotide. The masking, light deprotection, and coupling process can then be repeated to synthesize the next nucleotide, until the nucleotide chain is of the specified length.

Advantageously, the method of the present invention is carried out in a robotics system including robotic plating and a robotic liquid transfer system, e.g. using microfluidics, i.e. channelled structured.

A particular preferred method according to the present invention is as follows:

- 1. Obtaining a sample, e.g. bone marrow or peripheral blood aliquots, from a patient having AML
- 2. Extracting RNA, preferably mRNA, from the sample
 - 3. Reverse transcribing the RNA into cDNA
 - 4. In vitro transcribing the cDNA into cRNA
 - 5. Fragmenting the cRNA
 - 6. Hybridizing the fragmented cRNA on standard microarrays
- 7. Determining hybridization

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In another embodiment, the present invention is directed to the use of at least one marker selected from the markers identifiable by their Affymetrix Identification Numbers (affy ID) as defined in Tables 1, and/or 2 for the manufacturing of a diagnostic for distinguishing AML-specific FLT3 length mutations from TKD mutations. The use of the present invention is particularly advantageous for distinguishing AML-specific FLT3 length mutations from TKD mutations in an individual having AML. The use of said markers for diagnosis of AML-specific FLT3 length mutations from TKD mutations, preferably based on microarray technology, offers the following advantages: (1) more rapid and more precise diagnosis, (2) easy to use in laboratories without specialized experience, (3) abolishes the requirement for analyzing viable cells for chromosome analysis (transport problem), and (4) very experienced hematologists for cytomorphology and cytochemistry, immunophenotyping as well as cytogeneticists and molecularbiologists are no longer required.

Accordingly, the present invention refers to a diagnostic kit containing at least one marker selected from the markers identifiable by their Affymetrix Identification Numbers (affy ID) as defined in Tables 1, and/or 2 for distinguishing AML-specific FLT3 length mutations from TKD mutations, in combination with suitable auxiliaries. Suitable auxiliaries, as used herein, include buffers, enzymes, labelling compounds, and the like. In a preferred embodiment, the marker contained in the kit is a nucleic acid molecule which is capable of hybridizing to the mRNA corresponding to at least one marker of the present invention. Preferably, the at least one nucleic acid molecule is attached to a solid support, e.g. a polystyrene microtiter dish, nitrocellulose membrane, glass surface or to non-immobilized particles in solution.

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In another preferred embodiment, the diagnostic kit contains at least one reference for an AML-specific FLT3 length mutation and/or TKD mutation. As used herein, the reference can be a sample or a data bank.

In another embodiment, the present invention is directed to an apparatus for distinguishing AML-specific FLT3 length mutations from TKD mutations in a sample, containing a reference data bank obtainable by comprising

- (a) compiling a gene expression profile of a patient sample by determining the expression level at least one marker selected from the markers identifiable by their Affymetrix Identification Numbers (affy ID) as defined in Tables 1, and/or 2, and
- (b) classifying the gene expression profile by means of a machine learning algorithm.

According to the present invention, the "machine learning algorithm" is a computational-based prediction methodology, also known to the person skilled in the art as "classifier", employed for characterizing a gene expression profile. The signals corresponding to a certain expression level which are obtained by the microarray hybridization are subjected to the algorithm in order to classify the expression profile. Supervised learning involves "training" a classifier to recognize the distinctions among classes and then "testing" the accuracy of the classifier on an independent test set. For new, unknown samples the classifier shall predict into which class the sample belongs.

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Preferably, the machine learning algorithm is selected from the group consisting of Weighted Voting, K-Nearest Neighbors, Decision Tree Induction, Support Vector Machines (SVM), and Feed-Forward Neural Networks. Most preferably, the machine learning algorithm is Support Vector Machine, such as polynomial kernel and Gaussian Radial Basis Function-kernel SVM models.

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The classification accuracy of a given gene list for a set of microarray experiments is preferably estimated using Support Vector Machines (SVM), because there is evidence that SVM-based prediction slightly outperforms other classification techniques like k-Nearest Neighbors (k-NN). The LIBSVM software package (SVM-type: C-SVC, linear 2.36 used kernel version was (http://www.csie.ntu.edu.tw/~cjlin/libsvm/)). The skilled artisan is furthermore referred to Brown et al., Proc.Natl.Acad.Sci., 2000; 97: 262-267, Furey et al., Bioinformatics. 2000; 16: 906-914, and Vapnik V. Statistical Learning Theory. New York: Wiley, 1998.

In detail, the classification accuracy of a given gene list for a set of microarray experiments can be estimated using Support Vector Machines (SVM) as supervised learning technique. Generally, SVMs are trained using differentially expressed genes which were identified on a subset of the data and then this trained model is employed to assign new samples to those trained groups from a second and different data set. Differentially expressed genes were identified applying ANOVA and t-test-statistics (Welch t-test). Based on identified distinct gene expression signatures respective training sets consisting of 2/3 of cases and test sets with 1/3 of cases to assess classification accuracies are designated. Assignment of cases to training and test set is randomized and balanced by diagnosis. Based on the training set a Support Vector Machine (SVM) model is built.

According to the present invention, the apparent accuracy, i.e. the overall rate of correct predictions of the complete data set was estimated by 10fold cross validation. This means that the data set was divided into 10 approximately equally sized subsets, an SVM-model was trained for 9 subsets and predictions were generated for the remaining subset. This training and prediction process was repeated 10 times to include predictions for each subset. Subsequently the data set was split into a training set, consisting of two thirds of the samples, and a test set

with the remaining one third. Apparent accuracy for the training set was estimated by 10 fold cross validation (analogous to apparent accuracy for complete set). A SVM-model of the training set was built to predict diagnosis in the independent test set, thereby estimating true accuracy of the prediction model. This prediction approach was applied both for overall classification (multi-class) and binary classification (diagnosis $X \Rightarrow$ yes or no). For the latter, sensitivity and specificity were calculated:

Sensitivity = (number of positive samples predicted)/(number of true positives)

Specificity = (number of negative samples predicted)/(number of true negatives)

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In a preferred embodiment, the reference data bank is backed up on a computational data memory chip which can be inserted in as well as removed from the apparatus of the present invention, e.g. like an interchangeable module, in order to use another data memory chip containing a different reference data bank.

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The apparatus of the present invention containing a desired reference data bank can be used in a way such that an unknown sample is, first, subjected to gene expression profiling, e.g. by microarray analysis in a manner as described supra or in the art, and the expression level data obtained by the analysis are, second, fed into the apparatus and compared with the data of the reference data bank obtainable by the above method. For this purpose, the apparatus suitably contains a device for entering the expression level of the data, for example a control panel such as a keyboard. The results, whether and how the data of the unknown sample fit into the reference data bank can be made visible on a provided monitor or display screen and, if desired, printed out on an incorporated of connected printer.

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Alternatively, the apparatus of the present invention is equipped with particular appliances suitable for detecting and measuring the expression profile data and, subsequently, proceeding with the comparison with the reference data bank. In this embodiment, the apparatus of the present invention can contain a gripper arm and/or a tray which takes up the microarray containing the hybridized nucleic acids.

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In another embodiment, the present invention refers to a reference data bank for distinguishing AML-specific FLT3 length mutations from TKD mutations in a sample obtainable by comprising

- (a) compiling a gene expression profile of a patient sample by determining the expression level of at least one marker selected from the markers identifiable by their Affymetrix Identification Numbers (affy ID) as defined in Tables 1, and/or 2, and
- (b) classifying the gene expression profile by means of a machine learning algorithm.

Preferably, the reference data bank is backed up and/or contained in a computational memory data chip.

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The invention is further illustrated in the following table and examples, without limiting the scope of the invention:

TABLES 1.1-2.28

Tables 1-2 show AML subtype analysis of AML-specific FLT3 length mutations 15 from TKD mutations. The analysed markers are ordered according to their qvalues, beginning with the lowest q-values.

For convenience and a better understanding, Tables 1.1 to 2.28 are accompanied with explanatory tables (Table 1.1A to 2.28A) where the numbering and the Affymetrix Id are further defined by other parameters, e.g. gene bank accession number.

EXAMPLES

General experimental design of the invention and results 25 Example 1:

Different subtypes of acute myeloid leukemia (AML) can clearly be distinguished by morphology, cytogenetics, and molecular genetics. Mutations within the FLT3gene are the most common genetic alterations in AML. Length mutations in the juxtamembrane domain of FLT3 (FLT3-LM) were detected in 460/2134 (21.6%) and mutations in the tyrosine kinase domain (TKD-mutations) in 98/1711 (5.7%) of newly diagnosed AML in our series. Both kinds of FLT3 mutations can be found most frequently in AML with normal karyotype (AML-NK). While for TKD mutations a prognostic significance has not yet been shown, the FLT3-LM defines a prognostically unfavorable subset of AML-NK. Some of these pts have loss of the wildtype (WT) FLT3 allele in addition to the FLT3-LM. These pts were shown

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to have an even worse outcome than FLT3-LM+ pts that retain the WT-allele. Here we addressed the questions 1) whether pts with FLT3 mutations can be identified from those without FLT3 mutations within the AML-NK and 2) whether different types of FLT3 mutations can be identified by distinct gene expression signatures. Therefore, 148 cases with AML-NK were analyzed by U133 set microarrays (Affymetrix). For each patient the FLT3-LM status was assessed by GeneScan analysis (Applied Biosystems) and the TKD mutation status by melting curve analysis and sequencing. The total cohort was subdivided into 8 groups 1) AML NK and no FLT3 mutation (n=63), 2) status 1: FLT3-LM/WT ratio <0.3 (n=12), 3) status 2: ratio 0.7-1.1 (n=19), 4) status 3: ratio of >1.2=partial loss of WT (n=30), 5) status 4: total loss of WT (n=5), 6) status 5: two or more low status mutations (n=5), 7) TKD mutation (n=10), 8) TKD + LM (n=3). Microarray data was analyzed by pattern recognition algorithms (Principal Component Analysis (PCA) and hierarchical clustering), as well as Support Vector Machines (SVM) for estimation of classification accuracies. Therefore, all samples were divided into a training set consisting of 2/3 of cases to built a SVM model and a test set with remaining 1/3 of cases. Differentially expressed genes were selected according to ANOVA and t-test-statistics in the training set. A specific expression pattern was assessed for each of the defined subgroups. Using pairwise comparisons, the TKD mutations can clearly be distingushed from the FLT3-LM. In addition, FLT3-LM with loss of WT reveal a specific expression pattern in comparison to low status FLT3-LM. By use of SVM comparisons to AML-NK and all other mutation classes an accuracy of 100% was found for status 4, 78% for status 3 (sensitivity 64%, specificity 84%), 74% for status 2 (sensitivity 17%, specificity 88%), 75% for status 1 (sensitivity 50%, specificity 79%), 88% for TKD mutations (sensitivity 50%, specificity 95%), but only 8% for status 5 mutations. In conclusion a high percentage of cases of the different FLT3-mutations can be exactly assigned. Only the status 5 mutations can not be defined by a specific expression profile. Besides their clinical differences we could show that pts with FLT3-LM with different quantitative status of the LM as well as the TKD mutations are also different with regard to their expression pattern. This supports the hypothesis i) that FLT3-LM and TKD mutations act through different downstream target genes and play different functional roles in leukemogenesis; ii) that FLT3-LM cases with loss of the WT-allele should be regarded differently, i.e. with regard to prognosis and therapeutical interventions.

Example 2: General materials, methods and definitions of functional annotations

The methods section contains both information on statistical analyses used for identification of differentially expressed genes and detailed annotation data of identified microarray probesets.

Affymetrix Probeset Annotation

All annotation data of GeneChip® arrays are extracted from the NetAffxTM Analysis Center (internet website: www.affymetrix.com). Files for U133 set arrays, including U133A and U133B microarrays are derived from the June 2003 release. The original publication refers to: Liu G, Loraine AE, Shigeta R, Cline M, Cheng J, Valmeekam V, Sun S, Kulp D, Siani-Rose MA. NetAffx: Affymetrix probesets and annotations. Nucleic Acids Res. 2003;31(1):82-6.

The sequence data are omitted due to their large size, and because they do not change, whereas the annotation data are updated periodically, for example new information on chromomal location and functional annotation of the respective gene products. Sequence data are available for download in the NetAffx Download Center (www.affymetrix.com)

Data fields:

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In the following section, the content of each field of the data files are described.

Microarray probesets, for example found to be differentially expressed between different types of leukemia samples are further described by additional information.

The fields are of the following types:

- 1. GeneChip Array Information
- 30 2. Probe Design Information
 - 3. Public Domain and Genomic References
 - 1. GeneChip Array Information

35 HG-U133 ProbeSet_ID:

HG-U133 ProbeSet_ID describes the probe set identifier. Examples are: 200007_at, 200011_s_at, 200012_x_at.

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GeneChip:

The description of the GeneChip probe array name where the respective probeset is represented. Examples are: Affymetrix Human Genome U133A Array or Affymetrix Human Genome U133B Array.

2. Probe Design Information

Sequence Type:

The Sequence Type indicates whether the sequence is an Exemplar, Consensus or Control sequence. An Exemplar is a single nucleotide sequence taken directly from a public database. This sequence could be an mRNA or EST. A Consensus sequence, is a nucleotide sequence assembled by Affymetrix, based on one or more sequence taken from a public database.

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Transcript ID:

The cluster identification number with a sub-cluster identifier appended.

Sequence Derived From:

The accession number of the single sequence, or representative sequence on which the probe set is based. Refer to the "Sequence Source" field to determine the database used.

Sequence ID:

For Exemplar sequences: Public accession number or GenBank identifier. For Consensus sequences: Affymetrix identification number or public accession number.

Sequence Source:

The database from which the sequence used to design this probe set was taken. Examples are: GenBank®, RefSeq, UniGene, TIGR (annotations from The Institute for Genomic Research).

3. Public Domain and Genomic References

Most of the data in this section come from LocusLink and UniGene databases, and are annotations of the reference sequence on which the probe set is modeled.

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Gene Symbol and Title:

A gene symbol and a short title, when one is available. Such symbols are assigned by different organizations for different species. Affymetrix annotational data come from the UniGene record. There is no indication which species-specific databank was used, but some of the possibilities include for example HUGO: The Human Genome Organization.

MapLocation:

The map location describes the chromosomal location when one is available.

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Unigene_Accession:

UniGene accession number and cluster type. Cluster type can be "full length" or "est", or "---" if unknown.

20 LocusLink:

This information represents the LocusLink accession number.

Full Length Ref. Sequences:

Indicates the references to multiple sequences in RefSeq. The field contains the ID and description for each entry, and there can be multiple entries per probeSet.

Example 3: Sample preparation, processing and data analysis

Method 1:

Microarray analyses were performed utilizing the GeneChip® System (Affymetrix, Santa Clara, USA). Hybridization target preparations were performed according to recommended protocols (Affymetrix Technical Manual). In detail, at time of diagnosis, mononuclear cells were purified by Ficoll-Hypaque density centrifugation. They had been lysed immediately in RLT buffer (Qiagen, Hilden, Germany), frozen, and stored at -80°C from 1 week to 38 months. For gene expression profiling cell lysates of the leukemia samples were thawed,

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homogenized (QIAshredder, Qiagen), and total RNA was extracted (RNeasy Mini Kit, Qiagen). Subsequently, 5-10 µg total RNA isolated from 1 x 10⁷ cells was used as starting material for cDNA synthesis with oligo[(dT)₂₄T7promotor]₆₅ primer (cDNA Synthesis System, Roche Applied Science, Mannheim, Germany). cDNA products were purified by phenol/chlorophorm/IAA extraction (Ambion, Austin, USA) and acetate/ethanol-precipitated overnight. For detection of the hybridized target nucleic acid biotin-labeled ribonucleotides were incorporated during the following in vitro transcription reaction (Enzo BioArray HighYield RNA Transcript Labeling Kit, Enzo Diagnostics). After quantification by spectrophotometric measurements and 260/280 absorbance values assessment for quality control of the purified cRNA (RNeasy Mini Kit, Qiagen), 15 µg cRNA was fragmented by alkaline treatment (200 mM Tris-acetate, pH 8.2/500 mM potassium acetate/150 mM magnesium acetate) and added to the hybridization cocktail sufficient for five hybridizations on standard GeneChip microarrays (300 µl final volume). Washing and staining of the probe arrays was performed according to the recommended Fluidics Station protocol (EukGE-WS2v4). Affymetrix Microarray Suite software (version 5.0.1) extracted fluorescence signal intensities from each feature on the microarrays as detected by confocal laser scanning according to the manufacturer's recommendations.

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Expression analysis quality assessment parameters included visitual array inspection of the scanned image for the presence of image artifacts and correct grid alignment for the identification of distinct probe cells as well as both low 3'/5' ratio of housekeeping controls (mean: 1.90 for GAPDH) and high percentage of detection calls (mean: 46.3% present called genes). The 3' to 5' ratio of GAPDH probesets can be used to assess RNA sample and assay quality. Signal values of the 3' probe sets for GAPDH are compared to the Signal values of the corresponding 5' probe set. The ratio of the 3' probe set to the 5' probe set is generally no more than 3.0. A high 3' to 5' ratio may indicate degraded RNA or inefficient synthesis of ds cDNA or biotinylated cRNA (GeneChip[®] Expression Analysis Technical Manual, www.affymetrix.com). Detection calls are used to determine whether the transcript of a gene is detected (present) or undetected (absent) and were calculated using default parameters of the Microarray Analysis Suite MAS 5.0 software package.

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Method 2:

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Bone marrow (BM) aspirates are taken at the time of the initial diagnostic biopsy and remaining material is immediately lysed in RLT buffer (Qiagen), frozen and stored at -80 C until preparation for gene expression analysis. For microarray analysis the GeneChip System (Affymetrix, Santa Clara, CA, USA) is used. The targets for GeneChip analysis are prepared according to the current Expression Analysis. Briefly, frozen lysates of the leukemia samples are thawed, homogenized (QIAshredder, Qiagen) and total RNA extracted (RNeasy Mini Kit, Qiagen). Normally 10 ug total RNA isolated from 1 x 107 cells is used as starting material in the subsequent cDNA-Synthesis using Oligo-dT-T7-Promotor Primer (cDNA synthesis Kit, Roche Molecular Biochemicals). The cDNA is purified by phenol-chlorophorm extraction and precipitated with 100% Ethanol over night. For detection of the hybridized target nucleic acid biotin-labeled ribonucleotides are incorporated during the in vitro transcription reaction (Enzo® BioArrayTM HighYield™ RNA Transcript Labeling Kit, ENZO). After quantification of the purified cRNA (RNeasy Mini Kit, Qiagen), 15 ug are fragmented by alkaline treatment (200 mM Tris-acetate, pH 8.2, 500 mM potassium acetate, 150 mM magnesium acetate) and added to the hybridization cocktail sufficient for 5 hybridizations on standard GeneChip microarrays. Before expression profiling Test3 Probe Arrays (Affymetrix) are chosen for monitoring of the integrity of the cRNA. Only labeled cRNA-cocktails which showed a ratio of the messured intensity of the 3' to the 5' end of the GAPDH gene less than 3.0 are selected for subsequent hybridization on HG-U133 probe arrays (Affymetrix). Washing and staining the Probe arrays is performed as described (siehe Affymetrix-Original-Literatur (LOCKHART und LIPSHUTZ). The Affymetrix software (Microarray Suite, Version 4.0.1) extracted fluorescence intensities from each element on the arrays as detected by confocal laser scanning according to the manufacturers recommendations.

Table 1

	One-Versus-All							
(0)	/A)							-
1.1	D835 versus rest			:				
#	affy id	HUGO name	fc	þ	[q	stn	t	Мар
-	235040_at	DKFZp761H0421	-2.50	2.75E-14	7.95E-10	-0.74	0 74	Location 17q21.2
				8.72E-14				
	221809_at	KIAA1464	-3.47				<u> </u>	16q21
3	208963_x_at	FADS1	-9.33	4.11E-13	3.97E-09	-0.67	1	11q12.2- q13.1
4	202111_at	SLC4A2	-4.12	1.37E-12	9.92E-09	-0.65		7q35-q36
5	208420_x_at	SUPT6H	-1.76	7.94E-09	1.44E-05	-0.69	-7.38	17q11.2
6	219254_at	FLJ22222	-3.09	1.94E-09	4.67E-06	-0.67	-7.33	17q25.3
7	230285_at	DKFZp313A2432	-1.99	1.14E-08	1.93E-05	-0.68	-7.25	11p14.2
	208791_at	CLU	-6.64	6.52E-11	3.77E-07	-0.59		8p21-p12
	206301_at	TEC	-3.41	1.36E-10	5.64E-07			4p12
L	236140_at	GCLM	-3.11					1p22.1
	209179_s_at	LENG4	-2.03				<u> </u>	19q13.4
	215710_at	SIAT4C	-2.21	1.63E-09	<u></u>	<u> </u>		11q23-q24
	209739_s_at	DXS1283E	-2.82					Xp22.3
	213042_s_at	ATP2A3	-3.04	<u> </u>	<u> </u>	<u> </u>	<u>l. </u>	17p13.3
	200721_s_at	ACTR1A	-1.52				<u> </u>	10q24.32
	206494_s_at	ITGA2B	-4.84		.\			17q21.32
<u> </u>		LOC113251	-2.37					l
	238959_at	LOC113231	<u> </u>		<u> </u>	<u></u>	<u> </u>	12q13.12
	225233_at	TDINAAA	-3.31			<u> </u>		
<u></u>	226445_s_at	TRIM41	-1.34		<u> </u>			5q35.3
	224851_at	DOL DOG	-2.15					
	208996_s_at	POLR2C	-1.43			<u> </u>		16q13-q21
	227669_at		-1.60	<u>. </u>	<u> </u>	<u> </u>	<u> </u>	<u></u> ,
23	208962_s_at	FADS1	-2.68	1.23E-06	5.83E-04	-0.64	-6.33	11q12.2- q13.1
24	209392_at	ENPP2	-3.31	7.28E-09	1.40E-05	-0.54	-6.33	8q24.1
	218832_x_at	ARRB1	-2.78	3.13E-09	6.96E-06		1	11q13
	205227 at	IL1RAP	-2.79		<u> </u>			3q28
	223176_at	MGC14254	-2.30		<u> </u>	<u> </u>	<u> </u>	6p21.2
	208756_at	EIF3S2	-1.32	<u> </u>	<u> </u>		<u> </u>	1p34.1
	233013_x_at		-1.36					
	202427_s_at	DKFZP564B167	-1.50		<u> </u>	<u> </u>		1q24
	243631_at		-1.77	<u> </u>		<u>i </u>	<u></u>	<u> </u>
	226282_at	 	-19.14			<u> </u>	<u></u>	
	210571_s_at	CMAH	-2.06			.l	<u> </u>	6p21.32
	212968_at	RFNG	-1.42	<u> </u>				17q25
	223364_s_at	DDX37	-2.90	<u></u>	<u> </u>	<u> </u>		12q24.31
	222425_s_at	DKFZP586F1524		<u> </u>	<u> </u>			17q11.1
ļ	213800 at	HF1	-3.68		<u> </u>		<u> </u>	1q32
	202974_at	MPP1	-1.62					Xq28
130	202914_al	IVIFFI	-1.02	1.102-07	1.02E-04	-0.55	-0.09	17420

39	204379_s_at	FGFR3	-3.29	1.23E-08	1.97E-05	-0.50	-6.06	4p16.3
40	36936_at	TSTA3	-1.71	2.41E-07	1.70E-04	-0.55	-6.05	8q24.3
41	201932_at	MUF1	-2.07	1.61E-05	3.31E-03	-0.70	-6.04	1p33
42	214446_at	ELL2	-3.57	1.56E-08	2.38E-05	-0.50	-6.02	5q14.3
43	213983_s_at	KIAA0648	-1.68	1.95E-06	7.94E-04	-0.60	-6.02	4p14
44	221499 s at	NPEPL1	-1.55	1.61E-05	3.31E-03	-0.69	-6.02	20q13.32
45	228278_at		-2.71	7.75E-07	4.40E-04	-0.57	-6.02	
46	 223818_s_at	HBXAP	-2.74	4.21E-06	1.33E-03	-0.62	-6.01	11q13.3
	210233_at	IL1RAP	-2.88	5.03E-08	5.39E-05	-0.52	-6.01	3q28
48	 204936_at	MAP4K2	-2.84	1.72E-07	1.38E-04	-0.54	-5.99	11q13
49	212100_s_at	KIAA1649	-1.26	2.57E-06	9.16E-04	-0.60	-5.98	22q13.2
50	202593 s at	MIR16	-1.74	1.86E-06	7.86E-04	-0.59	-5.97	16p12-
						,		p11.2
								
	Dauble verses as a	<u> </u>						
1.2	Double versus rest	·		7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -				
#	affy id	HUGO name	fc	q	q	stn	t	Map
					7			Location
1	220623_s_at	TSGA10	2.18	2.21E-16	2.82E-13	1.85	20.39	2q11.2
2	205282_at	LRP8	1.75	1.29E-12	5.85E-10	1.49	16.19	1p34
3	214037_s_at	JM1	1.74	9.30E-13	4.42E-10	1.48	16.05	Xp11.23
4	219938_s_at	PSTPIP2	1.70	5.86E-30	2.40E-25	1.35	16.02	18q12
5	200595_s_at	EIF3S10	1.45	9.39E-11	2.63E-08	1.49	15.75	10q26
6	209476_at	TXNDC	1.69	1.86E-14	1.32E-11	1.40		14q21.3
7	201382_at	SIP	1.91	1.69E-06	1.21E-04	1.64		1q24-q25
8	213053_at	KIAA0841	1.55	6.33E-16	7.19E-13	1.33	1	19q13.11
9	205424_at	ProSAPiP2	-3.49	7.76E-28	1.59E-23	-1.20	-14.36	17q21.32
10	218109_s_at	FLJ14153	1.63	2.34E-11	7.71E-09	1.29		3q25.32
11	222583_s_at	NUP50	1.73	2.35E-18	6.02E-15	1.20	13.83	22q13.31
12	202462_s_at	KIAA0801	1.56	<u> </u>	<u> </u>	1.35	<u> </u>	5q31.1
i	222779_s_at	HSA277841	1.63	<u> </u>		<u> </u>		17p13.3
14	214092_x_at	SFRS14	1.42	1.30E-21			<u> </u>	19p12
	232075_at	REC14	1.90					15q24.1
16	200809_x_at	RPL12	-1.18		1	<u> </u>	<u></u>	<u> </u>
	217746_s_at	PDCD6IP	1.41				<u> </u>	3p22.1
	229812_at	FLJ23277	1.62	<u></u>	<u> </u>			1p36.12
<u> </u>	202228_s_at	SDFR1	1.70	<u> </u>	<u> </u>	<u> </u>	<u> </u>	15q22
	208700_s_at	TKT	1.54			<u> </u>	<u> </u>	3p14.3
	244180_at		-5.42	<u>. </u>	<u> </u>	<u> </u>		
	208064_s_at	SIAT8C	-5.13	<u> </u>				18q21.2
	241086_at		-3.99	<u> </u>	J	<u> </u>		
24	209206_at	SEC22L1	1.42	6.26E-21	2.85E-17	1.04	12.30	1q21.2- q21.3
25	241330_x_at		-7.94	2.29E-23	1.87E-19	-1.02	-12.28	والمراجع والمحارب وال
26	201784_s_at	SMAP	1.38	1.43E-13	8.01E-11	1.09	12.28	11p15.1
27	202306_at	POLR2G	1.52	1.33E-05	6.94E-04	1.33	12.17	11q13.1
28	208374_s_at	CAPZA1	1.47	2.47E-06	1.66E-04	1.25	12.06	1p13.1
							<u> </u>	

T		1.00450000	1.59	6.03E-06	3.56E-04	1.26	11.88	(a26.3
	222673_x_at	LOC159090	1.74	2.55E-05	1.20E-03	1.27	11.55	
_ I_	203983_at	TSNAX		8.25E-11	2.36E-08	1.04		20q13.1-
31	221471_at	TDE1	1.58	0.20E-11	Z.30L-00	1.04	l l	13.3
32	218538_s_at	MRS2L	1.69	9.92E-06	5.43E-04	1.21		Sp22.3- 522.1
33	232612_s_at	FLJ10035	-2.05	2.46E-21	1.26E-17	-0.95	-11.36	
34	213911_s_at	H2AFZ	1.37	5.73E-05	2.32E-03	1.28	11.31	
35	201464_x_at	JUN	1.78	9.29E-07	7.30E-05	1.13		1p32-p31
36	227442_at	FLJ38991	1.40	6.88E-15	5.52E-12	0.97	11.14	4q13.3
37	238673_at		-2.39	1.17E-17	2.08E-14	-0.95	-11.13	
38	210830_s_at	PON2	-2.93	1.61E-20	6.59E-17	-0.92	-11.08	7q21.3
39	215424_s_at	SNW1	1.27	3.03E-20	1.03E-16	0.92	11.05	14q24.3
40	236803_at	NBR2	-5.13	2.27E-12	9.59E-10	-0.96	-10.86	17q21
41	204798_at	MYB	1.62	6.88E-07	5.69E-05	1.08	10.85	6q22-q23
42	218243_at	RUFY1	1.37	1.65E-08	2.24E-06	1.02	10.83	5q35.3
	201909_at	RPS4Y	-28.68	3.00E-20	1.03E-16	-0.90	-10.80	Yp11.3
	205360_at	PFDN4	-3.89	5.24E-10	1.18E-07	-0.99	-10.78	20q13
<u> </u>	236371 s at	NCOA6IP	-2.69	3.66E-20	1.15E-16	-0.89	-10.77	8q11
	204082_at	PBX3	1.63	1.03E-17	1.98E-14	0.91	10.74	9q33-q34
	207764_s_at	HIPK3	1.49	2.64E-16	3.28E-13	0.92	10.72	11p13
1	203445_s_at	OS4	-1.34	8.70E-20	2.54E-16	-0.89	-10.66	12q13-q15
	219600_s_at	C21orf4	1.62	3.00E-05	1.37E-03	1.16	10.65	21q22.11
·	213737_x_at		1.50	2.58E-06	1.72E-04	1.07	10.58	
-	7210701_X_ut							
-								
1 3	Status 1 versus	rest						
	Status I versus	1001						
#	affy id	HUGO name	fc	р	q	stn	t	Map Location
-	1 217246_s_at	EPAG	-3.11	8.86E-08	2.19E-04	-0.73		
-	2 205013 s_at	ADORA2A	-1.98	7.26E-09	5.37E-05	-0.61	-6.79	22q11.23
 	3 217450 at		-2.14	8.12E-10	1.57E-05	-0.56	-6.65	
	4 237243_at		-3.06	1.22E-08	7.41E-05	-0.59	-6.62	
	5 220363 s_at	ELMO2	-3.43	1.47E-09	1.57E-05	-0.54	-6.51	20q13
	6 208145 at	FLJ20802	-2.72	1.70E-09	1.57E-05	-0.54	-6.48	20p13
<u> </u>	7 229262_at		-2.83	1.52E-09	1.57E-05	-0.54	-6.48	8
<u> </u>	8 218059 at	LOC51123	-1.4	6.64E-08	3 1.76E-04	-0.60	-6.46	8q22.3
	9 204383_at	DGCR14	-1.5	4.98E-06	2.71E-03	-0.74	-6.35	22q11.21
	0 242713_at		-2.09	6.22E-08	3 1.76E-04	-0.58	-6.32	2
	1 214266_s_at	ENIGMA	-2.42	<u> </u>	9.78E-05	-0.55	-6.29	5q35.3
	2 211523_at	GNRHR	-2.9	8 2.96E-0	2.03E-03	3 -0.67	-6.20) 4q21.2
	3 223441_at	SLC17A5	-1.8			-0.53	-6.19	6q14-q15
	4 227045 at		-1.5			4 -0.56	-6.19	9
<u> </u>	5 238785 at		-1.5					
<u> </u>		SCAMP-4	-1.7					9 19p13.3
	6 213244_at	GRIA3	-2.6					5 Xq25-q26
	7 206730_at	GRIAS	-1.9					
1	8 228812_at		-1.8	2.001-0	2.001-0	J	3.0	<u> </u>

						•		
	210260_s_at	GG2-1	-1.67	2.18E-07	4.24E-04	-0.52		5q23.1
	209898_x_at	ITSN2	-1.62	2.54E-07	4.48E-04			2pter-p25.1
21	233888_s_at	SRGAP1	-2.47	3.16E-07	5.08E-04	-0.53	-5.83	12q14.1
22	201110_s_at	THBS1	-5.55	4.77E-08	1.61E-04	-0.48		15q15
23	224230_at	IL1F8	-2.30	3.51E-07	5.20E-04	-0.51	-5.74	2q12-q14.1
24	205633_s_at	ALAS1	-2.02	3.39E-07	5.20E-04	-0.51	-5.69	3p21.1
25	201369_s_at	ZFP36L2	-2.07	3.21E-06	2.09E-03	-0.55	-5.63	2p22.3-p21
26	204614_at	SERPINB2	-4.71	9.95E-08	2.30E-04	-0.47	-5.62	18q21.3
27	223346_at	VPS18	-1.65	8.03E-06	3.50E-03	-0.59	-5.61	15q14-q15
28	226566_at	TRIM11	-1.55	1.65E-06	1.52E-03	-0.52	-5.58	1q42.13
29	212117_at	TC10	-1.55	2.29E-06	1.73E-03	-0.53	-5.58	2p21
30	240943_at		-2.15	1.43E-06	1.46E-03	-0.52	-5.56	
31	213033_s_at		-1.99	2.15E-07	4.24E-04	-0.47	-5.56	
32	216982_x_at		-2.93	1.44E-07	3.15E-04	-0.46	-5.55	
33	235705_at		-2.15	6.09E-07	8.05E-04	-0.49	-5.54	
34	234952_s_at	KIAA1542	-1.93	1.01E-05	4.02E-03	-0.57	-5.49	11p15.5
35	207082_at	CSF1	-1.99	5.24E-07	7.18E-04	-0.48	-5.48	1p21-p13
36	216180_s_at		-3.49	2.30E-07	4.26E-04	-0.46	-5.47	
37	204965_at	GC	-2.50	7.45E-07	8.73E-04	-0.48	-5.46	4q12-q13
	201460 at	MAPKAPK2	-1.47	1.35E-05	4.80E-03	-0.57		1q32
39	239334_at		-2.59	1.58E-06	1.52E-03	-0.49		
11	222383_s_at	ALOXE3	-1.93	2.69E-07	4.52E-04	-0.45	-5.41	17p13.1
	223596 at	SLC12A6	-1.73	6.77E-07	8.64E-04	-0.47		15q13-q15
	 240949_x_at		-2.33	5.28E-06				
	203045 at	NINJ1	-2.30					9q22
	211030_s_at	SLC6A6	-5.12				_	3p25-p24
	224669 at	C20orf169	-1.32	<u> </u>				20q13.11
L	207742_s_at	NR6A1	-1.80		<u> </u>			9q33-q34.1
	216672_s_at	MYT1L	-2.40		8.73E-04			2p25.3
	211411 at		-2.31	1.80E-06			-5.29	<u> </u>
	221697_at		-2.20					
	227539_at	GNA13	-1.90					17q24.3
-				0.002 00		0.02		1.421.0
-							<u> </u>	
1 4	Status 2 versus res	et .						
	Otatus Z versus re.	· · · · · · · · · · · · · · · · · · ·						
#	affy id	HUGO name	fc	n	0	stn	 	Мар
Tr.	any id			p	q	Jour		Location
1	228423_at		-1.95	6.99E-06	8.80E-02	-0.44	-4.88	
2	205372_at	PLAG1	-2.63	4.35E-06	8.80E-02	-0.41	-4.84	8q12
3	229963_at		-3.45	6.20E-06	8.80E-02	-0.41	-4.76	
4	230341_x_at	ADAMTS10	-1.56	1.14E-05	9.44E-02	-0.43	-4.74	19p13.2
5	236522_at		-1.47	1.25E-05	9.44E-02	-0.40	-4.62	
6	214462_at	SOCS4	-1.51	7.60E-05	2.31E-01	-0.50	-4.59	18q22.2
7	234216_at	 	-1.48	3.15E-05	1.68E-01	-0.42	-4.55	
	220145_at	FLJ21159	-3.36	1.92E-05	1.21E-01	-0.37	-4.42	4q31.3
	203854_at	IF	-2.01	3.56E-05	1.68E-01	-0.37		4q25
	<u> </u>		<u> </u>			<u> </u>		

 _	00000	00744	4 05	0.400 00	2 225 04	0.40	4 00	6-40 4
	202967_at	GSTA4	-1.35	9.19E-05	2.32E-01	-0.40		6p12.1
	215139_at		1.96	3.50E-04	3.00E-01	0.57	4.24	
12	207472_at	PRO1992	-2.56	8.58E-05	2.31E-01	-0.38	-4.19	6q15
13	215487_x_at		-1.92	1.39E-04	2.83E-01	-0.40	-4.17	
14	229563_s_at	RPL10A	-1.13	8.06E-05	2.31E-01	-0.37	, ,	6p21.3- p21.2
15	212151_at		-2.20	1.25E-04	2.78E-01	-0.39	-4.15	
16	206363_at	MAF	-2.86	7.74E-05	2.31E-01	-0.35	-4.12	16q22-q23
17	226682_at		-2.50	7.42E-05	2.31E-01	-0.34	-4.08	
18	220296_at	FLJ11715	-1.60	2.02E-04	2.83E-01	-0.40	-4.08	5q33.2
19	212843_at	NCAM1	-2.81	7.73E-05	2.31E-01	-0.34	-4.07	11q23.1
20	202972_s_at	FAM13A1	-1.27	1.81E-04	2.83E-01	-0.39	-4.06	4q22.1
21	237942 at	SNRK	-1.53	3.57E-04	3.00E-01	-0.45	-4.05	3p21.32
	218409 s at	DNAJC1	1.44	4.39E-04	3.43E-01	0.47	4.03	10p12.31
	240349 at		-1.94	1.22E-04	2.78E-01	-0.35	-4.02	
	232341 x at	HABP4	-1.40	1.83E-04	2.83E-01	-0.37	-4.01	9q22.3-q31
_		CFL1	-1.12	2.41E-04	2.84E-01	-0.38		11q13
26	234809_at	HCA127	-1.93	2.10E-04	2.83E-01	-0.37	-3.98	Xq11.1
	200099_s_at - HG	-U133B	-1.13	1.80E-04	2.83E-01	-0.36	-3.98	
	200032_s_at - HG-U133B	RPL9	-1.10	1.97E-04	2.83E-01	-0.36	-3.97	4p13
29	217558_at	CYP2C9	-1.38	2.13E-04	2.83E-01	-0.36	-3.95	10q24
30	241435 at		-1.72	1.55E-04	2.83E-01	-0.34	-3.93	_
31	200014_s_at - HG-U133B	HNRPC	1.21	5.96E-04	3.75E-01	0.45	3.90	14q11.1
32	240555_at		-1.75	2.30E-04	2.83E-01	-0.35	-3.90	
33	240568_at		-1.52	2.13E-04	2.83E-01	-0.35	-3.90	
34	206694_at	PNLIPRP1	-1.74	1.85E-04	2.83E-01	-0.34	-3.89	10q26.11
35	242995_at		-1.51	5.61E-04	3.72E-01	-0.43	-3.89	
36	222379_at		-1.92	3.54E-04	3.00E-01	-0.38	-3.88	
37	204793_at	KIAA0443	-1.87	2.20E-04	2.83E-01	-0.34	-3.86	Xq22.1
38	221715_at		-1.98	2.97E-04	2.98E-01	-0.35	-3.83	
39	AFFX-BioDn-3_at	- HG-U133B	-1.16	2.69E-04	2.90E-01	-0.34	-3.83	
40	222984_at	PAIP2	1.17	6.26E-04	3.76E-01	0.42	3.83	5q31.3
41	211682_x_at	UGT2B28	-1.70	2.32E-04	2.83E-01	-0.33	-3.82	4q13.3
L	241808_at		-2.35	2.65E-04	2.90E-01	-0.34	-3.82	
	243542_at		-2.14	3.13E-04	3.00E-01	-0.34	-3.80	
	228003_at		-1.42	3.28E-04	3.00E-01	-0.34	-3.79	
	227935_s_at	MGC16202	-1.43	4.45E-04	3.43E-01	-0.36	-3.79	10q23.32
<u> </u>	213954_at	KIAA0888	-1.99	2.77E-04	2.91E-01	-0.33	-3.78	5q13.2
<u> </u>	7 233271_at		-1.34	4.80E-04	3.59E-01	-0.36	-3.76	
	3 205495 s at	GNLY	-2.35	2.63E-04	2.90E-01	-0.31	-3.75	2p12-q11
	203830 at	NJMU-R1	1.60	1.16E-03	4.31E-01	0.51	3.75	17q11.2
) 222702_x_at	CRIPT	1.44		4.35E-01	0.50	3.72	2p21
-								
		 			 			
1 5	Status 3 versus re			 				
	Joiaius J veisus le			<u> </u>	<u> </u>			<u> </u>

		·						
#	affy id	HUGO name	fc		q	stn		Map Location
1	211396_at	FCGR2B	-2.71	1.56E-09		-0.54	-6.47	1q23
2	237169_at		-2.81			-0.52	-6.27	
3	203214_x_at	CDC2	-1.92	5.72E-09	4.23E-05	-0.52	l <u> </u>	10q21.1
4	209301_at	CA2	-2.58	1.02E-08	4.46E-05	-0.51	-6.11	8q22
5	239327_at		-3.72	1.04E-08	4.46E-05	-0.51	-6.09	
6	239413_at		-1.64	1.41E-08	4.46E-05	-0.51	-6.07	
7	217683_at		-3.00	2.57E-08	5.66E-05	-0.52	-6.03	
8	218726_at	DKFZp762E1312	-2.23	1.39E-08	4.46E-05	-0.50	-6.02	2q37.1
9	242496_at		-2.17	1.66E-08	4.61E-05	-0.50	-5.98	
10	205592_at	SLC4A1	-4.66	2.48E-08	5.66E-05	-0.49	-5.91	17q21-q22
11	56748_at	TRIM10	-1.71	3.13E-08	5.79E-05	-0.49	-5.89	6p21.3
	208416_s_at	SPTB	-5.37					14q23- q24.2
13	210559_s_at	CDC2	-2.00	<u> </u>	<u> </u>			10q21.1
14	226944_at	HTRA3	-1.85					4p16.1
	213344_s_at	H2AFX	-1.38			<u> </u>		11q23.2- q23.3
16	236305_at	LOC317671	-1.83	<u> </u>	<u> </u>			
17	211034_s_at	KIAA0614	-1.53	<u> </u>	<u> </u>		<u> </u>	12q24.12
18	209735_at	ABCG2	-1.80			<u> </u>		4q22
19	242245_at		-2.05	6.56E-08	<u> </u>	<u> </u>		
20	232278_s_at	FLJ20354	-2.14	1.04E-07	1.22E-04	-0.47	<u> </u>	1p31.2
21	237336_at	ADD2	-2.17	2.16E-07	1.88E-04	-0.48	<u> </u>	2p14-p13
22	229610_at	FLJ40629	-1.81	1.78E-07	1.72E-04	-0.48	-5.57	2q13
23	241060_x_at		-2.69	1.76E-07	1.72E-04	-0.46	-5.51	
24	235796_at		-1.67	1.89E-07	1.75E-04	-0.46	-5.50	
25	241859_at		-2.31	1.78E-07	1.72E-04	-0.46	-5.49	
26	206834_at	HBD	-2.10	2.93E-07	2.09E-04	-0.47	-5.49	11p15.5
27	207252_at	INE1	-1.94					Xp11.4- p11.3
28	237207_at		-3.56		<u> </u>			
	205198_s_at	ATP7A	-1.48					Xq13.2- q13.3
1	205631_at	KIAA0586	-1.29					14q22.3
	218904_s_at	FLJ10110	-2.1		_L	<u> </u>		9q21.13
	2 203124_s_at	SLC11A2	-1.92		<u>.]</u>			12q13
L	3 232313_at	DKFZp761O2018	<u> </u>					12q24.32
	1 220886_at	GABRQ	-1.4					Xq28
	229654_at		-1.79		<u> </u>			<u> </u>
	6 241807_x_at		-2.2					
	7 226179_at		-2.5					
<u> </u>	3 241538_at		-2.10			<u> </u>		
	210325_at	CD1A	-1.5		_ 		<u> </u>	1q22-q23
	229555_at	GALNT5	-1.69	_L			<u> </u>	2q24.1
	1 201059_at	EMS1	-1.9					11q13
42	2 232286_at		-1.9	6.22E-0	7 2.80E-04	-0.47	-5.35	

43	231274_s_at	MSCP	-2.31	3.62E-07	2.30E-04	-0.44		8p21.2
44	203999_at	SYT1	-1.39	5.83E-07	2.80E-04	-0.46		12cen-q21
45	211896_s_at	DCN	-1.93	4.20E-07	2.52E-04	-0.45	-5.33	12q13.2
46	218009_s_at	PRC1	-1.54	4.69E-07	2.68E-04	-0.45	-5.33	15q26.1
47	236574_at		-1.45	1.19E-06	3.70E-04	-0.49	-5.33	
<u> </u>	206468_s_at	CGI-01	-1.47	8.45E-07	3.13E-04	-0.47	-5.32	1q24-q25.3
L		FECH	-2.46	4.12E-07	2.52E-04	-0.44	-5.31	18q21.3
1 - 1		BOCT	-2.06	5.65E-07	2.79E-04	-0.45	-5.29	14q11.2
16	Status 4 versus res	<u> </u>						
#	affy id	HUGO name	fc	p	q	stn	t	Мар
η		11000 1101110		P	r			Location
1	222753_s_at	FLJ22649	-2.05	3.95E-12	2.05E-09	-1.16		4q34.2
2	216117_at		-3.02	5.88E-21	5.49E-17	-1.04	-12.28	
3	217239_x_at		-8.06	4.01E-22	8.21E-18	-0.96	-11.54	
4	219251_s_at	FLJ10300	2.44	9.19E-06	2.97E-04	1.48	11.51	7q36.3
5	214344_at	LOC92973	-6.00	5.86E-22	8.21E-18	-0.95	-11.47	9p13.1
6	201536_at	DUSP3	1.60	4.51E-15	7.01E-12	0.99	11.17	17q21
7	238109_at		2.27	1.09E-07	7.86E-06	1.17	11.07	
8	201242_s_at	ATP1B1	2.08	5.12E-07	2.74E-05	1.17	10.70	1q22-q25
9	202371_at	FLJ21174	1.75	6.60E-07	3.38E-05	1.17	10.62	Xq22.1
10	239652_at		-3.48	1.85E-13	1.48E-10	-0.94	-10.57	
11	204895_x_at	MUC4	-3.79	4.64E-19	3.07E-15	-0.88	-10.53	3q29
12	36545_s_at	KIAA0542	1.64	8.18E-06	2.70E-04	1.29	10.51	22q12.2
13	214677_x_at	IGLJ3	-6.38	1.98E-17	6.91E-14	-0.89	-10.48	22q11.1-
		1.0004040		5 405 40	0.075.45	0.00	40.24	q11.2
	215946_x_at	LOC91316	-2.75	.l.,	<u> </u>		<u> </u>	22q11.21
	215943_at	KIAA1661	-4.21		<u> </u>	<u> </u>		
	220530_at		-4.33		<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	214836_x_at	IGKC	-4.30	<u> </u>			<u> </u>	<u> </u>
	211838_x_at	PCDHA5	-3.99	<u> </u>				<u> </u>
	201022_s_at	DSTN	1.60					20p11.23
	242810_x_at		-4.64					
	221671_x_at	IGKC	-4.89					2p12
	2 204939_s_at	PLN	-3.76		<u> </u>			6q22.1
23	3 202404_s_at	COL1A2	-5.99		<u>i. </u>			7q22.1
24	243072_at		-4.49	<u> </u>		<u> </u>		
	219595_at	ZNF26	1.34	<u> </u>	<u> </u>			12q24.33
26	6 216573_at		-4.12				<u> </u>	_
27	7 213851_at		-2.43					<u> </u>
28	8 221651_x_at	IGKC	-4.60	3.31E-11				12p12
29	9 219059_s_at	XLKD1	-3.2			-0.83		1 11p15
30	0 234414_at	DKFZp434I1117	-2.18	3.50E-15	5.99E-12	-0.8	1 -9.5	1 9q22.31
3	1 217157_x_at	IGKC	-4.80	1.83E-10	4.21E-08	-0.87	7 -9.46	6 2p12
_	-		_	_	•		-	

33	220761_s_at	JIK	1.49	4.55E-08	3.86E-06	0.93	9.39	12q
34	211897_s_at	CRHR1	-3.91	3.12E-09	4.36E-07	-0.88	-9.30	17q12-q22
35	212608_s_at		1.75	1.55E-04	2.91E-03	1.42	9.28	
36	211302_s_at	PDE4B	-3.12	2.85E-11	1.08E-08	-0.84	-9.28	1p31
37	219964_at	ST7L	2.10	2.40E-05	6.40E-04	1.14	9.20	1p13.1
38	230864_at	MGC42105	-2.51	1.74E-08	1.74E-06	-0.89	-9.20	5p11
39	217688_at	ADCY2	-2.71	4.10E-14	4.25E-11	-0.79	-9.20	5p15.3
40	221005_s_at	PTDSS2	1.85	2.44E-05	6.50E-04	1.13	9.16	11p15
41	235549_at	LOC255488	-6.90	2.97E-15	5.93E-12	-0.77	-9.15	6p22.3
42	204909_at	DDX6	-1.72	2.63E-09	3.81E-07	-0.86	-9.10	11q23.3
43	220941_s_at	C21orf91	-1.66	3.29E-11	1.16E-08	-0.82	-9.10	21q21.1
44	206727_at	C9	-3.63	1.95E-15	4.54E-12	-0.76	-9.09	5p14-p12
45	213926_s_at	HRB	-3.19	5.44E-09	6.85E-07	-0.86	-9.06	2q36
46	215733_x_at	CTAG2	-1.74	5.06E-12	2.53E-09	-0.80	-9.05	Xq28
47	223280_x_at	MS4A6A	-6.39	2.85E-15	5.93E-12	-0.75	-9.00	11q12.1
48	225178_at	FLJ00166	1.85	1.16E-05	3.59E-04	1.05	8.99	3q27.2
49	209138_x_at	IGLJ3	-6.90	3.64E-15	5.99E-12	-0.75		22q11.1-
								q11.2
50	211430_s_at	IGHG3	-9.99	3.53E-15	5.99E-12	-0.74	-8.91	14q32.33
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1.7	Status 5 versus res	st						
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#	affy id	HUGO name	fc	5	~	stn	 	Man
								Map Location
1	206204_at	GRB14	-5.61	3.50E-20	1.24E-15			_
1 2	206204_at 208007_at			3.50E-20	1.24E-15	-0.91	-10.93	Location 2q22-q24
1 2 3	206204_at 208007_at 238067_at		-5.61	3.50E-20 6.56E-13 4.24E-17	1.24E-15 1.55E-09 7.49E-13	-0.91 -0.92	-10.93 -10.19 -9.59	Location 2q22-q24 Xq22.2
1 2 3 4	206204_at 208007_at 238067_at 219065_s_at	GRB14 FLJ20298 CGI-27	-5.61 -3.83	3.50E-20 6.56E-13 4.24E-17 1.51E-12	1.24E-15 1.55E-09 7.49E-13 3.13E-09	-0.91 -0.92 -0.80 0.85	-10.93 -10.19 -9.59 9.50	Location 2q22-q24 Xq22.2 2p23.1
1 2 3 4 5	206204_at 208007_at 238067_at 219065_s_at 203453_at	GRB14 FLJ20298	-5.61 -3.83 -12.46	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10	-0.91 -0.92 -0.80 0.85 -0.82	-10.93 -10.19 -9.59 9.50 -9.46	Location 2q22-q24 Xq22.2 2p23.1 12p13
1 2 3 4 5	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at	GRB14 FLJ20298 CGI-27 SCNN1A	-5.61 -3.83 -12.46 1.29 -2.94 -4.38	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09	-0.91 -0.92 -0.80 0.85 -0.82 -0.82	-10.93 -10.19 -9.59 9.50 -9.46 -9.33	Location 2q22-q24 Xq22.2 2p23.1 12p13
1 2 3 4 5 6 7	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at	GRB14 FLJ20298 CGI-27	-5.61 -3.83 -12.46 1.29 -2.94	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93	Location 2q22-q24 Xq22.2 2p23.1 12p13
1 2 3 4 5 6 7	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at	GRB14 FLJ20298 CGI-27 SCNN1A	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92	Location 2q22-q24 Xq22.2 2p23.1 12p13
1 2 3 4 5 6 7 8	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88	Location 2q22-q24 Xq22.2 2p23.1 12p13
1 2 3 4 5 6 7 8 9	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14
1 2 3 4 5 6 7 8 9 10	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.93 -8.88 -8.88 -8.88	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24
1 2 3 4 5 6 7 8 9 10 11 12	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 216661_x_at 208801_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11
1 2 3 4 5 6 7 8 9 10 11 12 13	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at 208801_at 210115_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.75	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27
1 2 3 4 5 6 7 8 9 10 11 12 13	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 216661_x_at 208801_at 210115_at 206159_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.75	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at 208801_at 210115_at 206159_at 233836_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10 1.43E-04 1.39E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.75 -0.74	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at 208801_at 210115_at 206159_at 233836_at 205487_s_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73 -4.85	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14 2.07E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10 1.43E-04 1.39E-10 1.39E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.77 -0.73 -0.92 -0.71	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21 Xq26.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 218661_x_at 208801_at 210115_at 206159_at 233836_at 205487_s_at 206294_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10 1.43E-04 1.39E-10 1.39E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.77 -0.73 -0.92 -0.71	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 218801_at 208801_at 206159_at 233836_at 205487_s_at 206294_at 243132_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10 TONDU	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73 -4.85	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14 2.07E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-04 1.39E-10 1.39E-10 1.39E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.75 -0.71 -0.71 -0.92 -0.71 -0.80	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53 -8.53 -8.51 -8.49	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21 Xq26.3 1p13.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at 208801_at 210115_at 206159_at 233836_at 205487_s_at 206294_at 243132_at 231010_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10 TONDU	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73 -4.85 -3.07	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14 2.07E-14 2.69E-09 4.76E-14	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10 1.43E-04 1.39E-10 1.39E-10 1.39E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.77 -0.73 -0.92 -0.71 -0.80 -0.80	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53 -8.53 -8.51 -8.49	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21 Xq26.3 1p13.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 218801_at 208801_at 206159_at 233836_at 205487_s_at 206294_at 243132_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10 TONDU HSD3B2	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73 -4.85 -3.07 -3.47	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14 2.07E-14 2.69E-09 4.76E-14 2.59E-09	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10 1.43E-10 1.39E-10 1.39E-10 1.39E-10 1.79E-06 1.87E-10	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.77 -0.73 -0.92 -0.71 -0.80 -0.71 -0.80 -0.79	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53 -8.53 -8.49 -8.49	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21 Xq26.3 1p13.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at 208801_at 210115_at 206159_at 233836_at 205487_s_at 206294_at 243132_at 231010_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10 TONDU HSD3B2	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73 -4.85 -3.07 -3.47 -1.86	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14 2.07E-14 2.69E-09 4.76E-14 2.59E-09 1.21E-07	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 9.07E-11 1.20E-08 1.43E-10 1.43E-04 1.39E-10 1.39E-10 1.79E-06 1.87E-10 1.76E-06 3.61E-05	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.77 -0.73 -0.92 -0.71 -0.80 -0.71 -0.80 -0.71 -0.80 -0.79	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53 -8.51 -8.49 -8.49 -8.46 -8.42	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21 Xq26.3 1p13.1 4q25
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	206204_at 208007_at 238067_at 219065_s_at 203453_at 244854_at 214668_at 243322_at 216978_x_at 219736_at 216661_x_at 208801_at 210115_at 206159_at 233836_at 205487_s_at 243132_at 231010_at 204337_at	GRB14 FLJ20298 CGI-27 SCNN1A C13orf1 TRIM36 CYP2C9 SRP72 RPL39L GDF10 TONDU HSD3B2	-5.61 -3.83 -12.46 1.29 -2.94 -4.38 -2.79 -4.21 -3.25 -7.66 -1.74 1.20 -5.45 -3.12 -2.73 -4.85 -3.07 -3.47 -1.86 -3.00	3.50E-20 6.56E-13 4.24E-17 1.51E-12 7.73E-14 8.32E-13 3.31E-10 3.99E-08 4.34E-15 2.50E-14 1.03E-14 6.46E-12 3.25E-14 8.12E-07 2.75E-14 2.07E-14 2.69E-09 4.76E-14 2.59E-09 1.21E-07 5.16E-13	1.24E-15 1.55E-09 7.49E-13 3.13E-09 2.73E-10 1.84E-09 4.05E-07 1.62E-05 5.11E-11 1.39E-10 1.43E-10 1.43E-04 1.39E-10 1.43E-10 1.79E-06 1.87E-10 1.76E-06 3.61E-05 1.40E-09	-0.91 -0.92 -0.80 0.85 -0.82 -0.82 -0.83 -0.89 -0.74 -0.75 -0.74 -0.77 -0.73 -0.92 -0.71 -0.80 -0.71 -0.80 -0.71 -0.80 -0.79	-10.93 -10.19 -9.59 9.50 -9.46 -9.33 -8.93 -8.92 -8.88 -8.86 -8.83 8.77 -8.70 -8.57 -8.53 -8.53 -8.51 -8.49 -8.46 -8.42 -8.35	Location 2q22-q24 Xq22.2 2p23.1 12p13 13q14 5q22.2 10q24 4q11 3q27 10q11.21 Xq26.3 1p13.1 4q25

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23	244692_at	FLJ39501	-4.63	3.19E-09	2.01E-06	-0.77	-8.30	19p13.11
24	215323_at		-2.96	2.87E-12	5.63E-09	-0.71	-8.30	
25	231380_at	VEST1	-4.21	1.68E-11	2.70E-08	-0.72	-8.26	8q13
26	202008_s_at	NID	-2.44	3.69E-10	4.35E-07	-0.74	-8.21	1q43
27	207052_at	HAVCR1	-2.69	2.97E-06	3.81E-04	-0.89	-8.06	5q33.2
28	214893_x_at	HCN2	-3.21	5.14E-13	1.40E-09	-0.67	-8.01	19p13.3
29	229894_s_at	KIAA1160	-1.74	8.79E-10	8.17E-07	-0.72	-7.94	3q21.3
30	238933_at	IRS1	-4.11	6.15E-13	1.55E-09	-0.66	-7.92	2q36
31	205879_x_at	RET	-1.96	8.86E-07	1.53E-04	-0.82	-7.90	10q11.2
32	220542_s_at	PLUNC	-2.12	3.66E-06	4.44E-04	-0.87	-7.88	20q11.2
33	203673_at	TG	-2.29	8.50E-06	8.16E-04	-0.90		8q24.2- q24.3
34	209742_s_at	MYL2	-2.19	5.67E-11	8.34E-08	-0.68		12q23- q24.3
35	211856_x_at	CD28	-2.93	4.17E-08	1.68E-05	-0.74	-7.79	
36	214823_at	ZNF204	-2.28	3.61E-09		-0.70		6p21.3
37	220636_at	DNAI2	-3.24	6.74E-09	3.50E-06	-0.70	-7.65	17q25
38	244858_at		-3.21	1.20E-11	2.02E-08	-0.65	-7.64	
39	206800_at	MTHFR	-2.56	4.91E-11	7.54E-08	-0.65	-7.59	1p36.3
40	230982_at		-3.64	1.61E-05	1.31E-03	-0.88	-7.55	
41	241909_at		-6.31	8.15E-12	1.44E-08	-0.63	-7.52	
42	239567_at		-3.50	2.15E-06	3.01E-04	-0.79	-7.51	
43	211466_at	NFIB	-4.12	4.01E-10	4.57E-07	-0.65	-7.43	9p24.1
44	208061_at	LOC51045	-3.55	3.44E-08	1.43E-05	-0.69	-7.40	
45	221109_at	DKFZp434C0923	-2.50	3.93E-09	2.35E-06	-0.66	-7.38	1q42.13
46	235526_at	·	-3.04	1.16E-06	1.90E-04	-0.75	-7.37	
47	240691_at		-4.05	2.00E-10	2.62E-07	-0.63	-7.34	
48	207952_at	IL5	-3.22	2.40E-08	1.07E-05	-0.67	-7.29	5q31.1
		LFNG	-3.00	4.14E-10	4.57E-07	-0.63	. 7.00	7.00
49	215270_at	121 140	-3.00			-0.05	-7.28	7p22
	215270_at 239286_at		-3.55					
50	<u> </u>							
1.8	239286_at normal versus res				6.17E-04		-7.27	
50 1.8 #	239286_at normal versus res affy id	t HUGO name	-3.55 fc	5.66E-06	6.17E-04	-0.78 stn	-7.27 t	Map Location
50 1.8 #	239286_at normal versus res affy id 209014_at	HUGO name	-3.55 fc -1.82	5.66E-06 p 1.05E-10	6.17E-04 9 1.88E-06	-0.78 stn -0.61	-7.27 t	Map Location Xp11.23
1.8 #	239286_at normal versus res affy id 209014_at 235391_at	t HUGO name	-3.55 fc -1.82 -2.57	5.66E-06 P 1.05E-10 1.29E-10	6.17E-04 9 1.88E-06 1.88E-06	-0.78 stn -0.61 -0.61	-7.27 t -7.12 -7.08	Map Location Xp11.23 8q21.3
1.8 # 2 3	239286_at normal versus res affy id 209014_at 235391_at 209392_at	HUGO name MAGED1 LOC137392 ENPP2	-3.55 fc -1.82 -2.57 -3.71	5.66E-06 p 1.05E-10 1.29E-10 4.35E-10	6.17E-04 q 1.88E-06 1.88E-06 4.24E-06	-0.78 stn -0.61 -0.62	-7.27 t -7.12 -7.08 -6.92	Map Location Xp11.23 8q21.3
1.8 # 1 2 3 4	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392	-3.55 fc -1.82 -2.57 -3.71 -3.62	5.66E-06 p 1.05E-10 1.29E-10 4.35E-10 1.16E-09	9 1.88E-06 1.88E-06 4.24E-06 4.40E-06	-0.78 stn -0.61 -0.62 -0.61	-7.27 t -7.12 -7.08 -6.92 -6.73	Map Location Xp11.23 8q21.3 8q24.1 8q21.3
1.8 # 1 2 3 4 5	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT	-3.55 fc -1.82 -2.57 -3.71 -3.62 -2.52	5.66E-06 p 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09	6.17E-04 9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06	-0.78 stn -0.61 -0.62 -0.61 -0.58	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1
50 1.8 # 1 2 3 4 5 6	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at 204120_s_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT ADK	-3.55 fc -1.82 -2.57 -3.71 -3.62 -2.52 -1.62	5.66E-06 P 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09 6.49E-10	6.17E-04 9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06	-0.78 stn -0.61 -0.62 -0.61 -0.58 -0.55	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65 -6.64	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1 10cen-q24
50 1.8 # 1 2 3 4 5 6 7	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at 204120_s_at 214698_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT ADK ROD1	-3.55 fc -1.82 -2.57 -3.62 -2.52 -1.62 -1.66	5.66E-06 P 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09 6.49E-10 1.03E-09	9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06 4.40E-06	-0.78 stn -0.61 -0.61 -0.62 -0.61 -0.58 -0.55 -0.54	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65 -6.64 -6.54	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1 10cen-q24 9q32
50 1.8 # 1 2 3 4 5 6 7 8	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at 204120_s_at 214698_at 226196_s_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT ADK ROD1 MGC16028	-3.55 fc -1.82 -2.57 -3.62 -3.62 -1.62 -1.66 -2.18	5.66E-06 p 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09 6.49E-10 1.03E-09 1.11E-09	9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06 4.40E-06 4.40E-06 4.40E-06	-0.78 stn -0.61 -0.61 -0.62 -0.61 -0.58 -0.55 -0.55	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65 -6.64 -6.54	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1 10cen-q24 9q32 14q24.2
50 1.8 # 1 2 3 4 5 6 7 8	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at 204120_s_at 214698_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT ADK ROD1	-3.55 fc -1.82 -2.57 -3.71 -3.62 -2.52 -1.62 -1.66 -2.18 -1.68	5.66E-06 P 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09 6.49E-10 1.03E-09 1.11E-09 2.94E-09	9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06 4.40E-06 4.40E-06 9.54E-06	-0.78 stn -0.61 -0.61 -0.62 -0.61 -0.58 -0.55 -0.54 -0.55	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65 -6.64 -6.54 -6.54	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1 10cen-q24 9q32
50 1.8 # 1 2 3 4 5 6 7 8 9	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at 204120_s_at 214698_at 226196_s_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT ADK ROD1 MGC16028	-3.55 fc -1.82 -2.57 -3.62 -3.62 -1.62 -1.66 -2.18	5.66E-06 P 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09 6.49E-10 1.03E-09 1.11E-09 2.94E-09	9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06 4.40E-06 4.40E-06 9.54E-06	-0.78 stn -0.61 -0.61 -0.62 -0.61 -0.58 -0.55 -0.54 -0.55	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65 -6.64 -6.54 -6.54	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1 10cen-q24 9q32 14q24.2 16p11.2
50 1.8 # 1 2 3 4 5 6 7 8 9 10	239286_at normal versus res affy id 209014_at 235391_at 209392_at 228011_at 204044_at 204120_s_at 214698_at 226196_s_at 203897_at	HUGO name MAGED1 LOC137392 ENPP2 LOC137392 QPRT ADK ROD1 MGC16028 LOC57149	-3.55 fc -1.82 -2.57 -3.71 -3.62 -2.52 -1.62 -1.66 -2.18 -1.68	5.66E-06 P 1.05E-10 1.29E-10 4.35E-10 1.16E-09 1.20E-09 6.49E-10 1.03E-09 1.11E-09 2.94E-09 8.52E-09	9 1.88E-06 1.88E-06 4.24E-06 4.40E-06 4.40E-06 4.40E-06 4.40E-06 4.40E-06 1.46E-05 1.46E-05	-0.78 stn -0.61 -0.61 -0.62 -0.61 -0.58 -0.55 -0.54 -0.55 -0.54 -0.55	-7.27 t -7.12 -7.08 -6.92 -6.73 -6.65 -6.64 -6.54 -6.54 -6.31 -6.30	Map Location Xp11.23 8q21.3 8q24.1 8q21.3 16p12.1 10cen-q24 9q32 14q24.2 16p11.2

13 2	215288_at	TRPC2	-2.77	6.53E-09	1.46E-05	-0.54		11p15.4- p15.3
14 2	203050 at	TP53BP1	-1.50	5.11E-09	1.46E-05	-0.52		15q15-q21
	201427_s_at	SEPP1	-2.32	6.34E-09	1.46E-05	-0.52	-6.21	
	213800_at	HF1	-3.36	1.11E-08	1.62E-05	-0.54	-6.19	
	203373_at	SOCS2	-3.55	7.08E-09	1.46E-05	-0.52	-6.18	
	202862_at	FAH	-1.89	9.54E-09	1.55E-05	-0.52		15q23-q25
	229971_at	GPR114	-2.06	8.07E-09	1.46E-05	-0.51		16q12.2
L	225029_at		-1.52	1.05E-08	1.62E-05	-0.51	-6.08	•
1	218188 s at	TIMM13	-1.56	1.25E-08	1.66E-05	-0.50	-6.05	19p13.3
	203581_at	RAB4A	-1.43	1.24E-08	1.66E-05	-0.50		1q42-q43
!	221509_at	DENR	-1.42	1.88E-08	2.39E-05	-0.50		12q24.31
<u> </u>	214039_s_at	LAPTM4B	-2.80	2.73E-08	3.33E-05	-0.51		8q22.1
	228077_at		-1.51	2.95E-08	3.45E-05	-0.49	-5.87	
	211727_s_at	COX11	-1.49	3.24E-08	3.61E-05	-0.49		17q22
	225237_s_at		-1.88	3.34E-08	3.61E-05	-0.49	-5.86	
11	204485_s_at	TOM1L1	-2.18	8.59E-08	8.97E-05	-0.49	-5.71	17q23.2
	227860_at	CPXM	-2.14	1.11E-07	1.04E-04	-0.47	-5.62	20p12.3- p13
30	212640_at	LOC201562	-1.47	9.74E-08	9.82E-05	-0.47		3q21.1
	214697 s at	ROD1	-1.48	1.02E-07	9.92E-05	-0.47	-5.61	9q32
32	243579_at	MSI2	-2.19	1.14E-07	1.04E-04	-0.47	-5.61	17q23.1
33	212070_at	GPR56	-3.01	1.81E-07	1.36E-04	-0.49	-5.59	16q13
34	214106_s_at	GMDS	-1.86	1.35E-07	1.16E-04	-0.47	-5.57	6p25
35	212364_at	MYO1B	-2.62	1.78E-07	1.36E-04	-0.48	-5.56	2q12-q34
36	224587_at	PC4	-1.40	1.35E-07	1.16E-04	-0.46	-5.55	5p13.3
37	202501_at	MAPRE2	-1.51	1.43E-07	1.19E-04	-0.46	-5.54	18q12.1
38	243526_at		-4.66	3.52E-07	2.19E-04	-0.53	-5.51	
39	220643_s_at	FAIM	-1.76	1.64E-07	1.33E-04	-0.46	-5.51	3q22.3
40	225240_s_at		-1.92	1.75E-07	1.36E-04	-0.46	-5.50	
41	74694_s_at	FRA	-1.42	1.96E-07	1.43E-04	-0.46	-5.47	16p12.1
42	225532_at	LOC91768	-1.83	2.20E-07	1.53E-04	-0.46	-5.46	18q11.1
43	230873_at	DKFZP434B103	-1.38	2.06E-07	1.47E-04	-0.45	-5.46	3p25.3
44	218395_at	FLJ13433	-1.48	2.33E-07	1.59E-04	-0.45	-5.44	12q23.2
45	229620_at	SEPP1	-2.57	3.63E-07	2.21E-04	-0.47	-5.41	5q31
46	234423_x_at		-1.62	3.11E-07	2.02E-04	-0.45	-5.40	
47	208767_s_at	LAPTM4B	-2.77	5.43E-07	2.78E-04	-0.50	-5.38	8q22.1
48	202043_s_at	SMS	-1.37	3.07E-07	2.02E-04	-0.45		Xp22.1
49	223075_s_at	IBA2	-2.65					9q34.13- q34.3
50	242414_at		-2.00	3.82E-07	2.28E-04	-0.46	-5.36	

Table 2

2. All-Pairs (AP)

2.1 D835 versus Double

# affy id	HUGO name	fc	p d	9	stn t	Мар
1 219938_s_at	PSTPIP2	-2.38	1.83E-06	2.05E-02	-3.11	Location -10.48 18q12
2 209981 at	PIPPIN	-3.52	7.22E-04	3.56E-01	-3.27	-10.27 22q13.2-
2 203301_at	1 11 11 11 11 11	0.02	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.002 01	0.21	q13.31
3 201382_at	SIP	-2.36	1.12E-06	2.05E-02	-2.69	-9.65 1q24-q25
4 229395_at	STX4A	-1.24	3.24E-06	2.71E-02	-2.61	-9.39 16p11.2
5 222779_s_a	t HSA277841	-1.89	1.58E-06	2.05E-02	-2.58	-9.29 17p13.3
6 210571_s_a	t CMAH	-3.04	9.39E-04	3.65E-01	-2.68	-8.61 6p21.32
7 222583_s_a	t NUP50	-2.04	1.31E-05	7.30E-02	-2.34	-8.07 22q13.31
8 238099_at	HSPA4	-2.98	8.49E-05	2.22E-01	-2.30	-8.04 5q31.1- q31.2
9 207764_s_a	t HIPK3	-1.90	1.93E-05	9.25E-02	-2.27	-7.77 11p13
10 203138_at	HAT1	-1.96	2.41E-05	9.78E-02	-2.13	-7.63 2q31.2- q33.1
11 223148_at	PIGS	-1.51	1.27E-05	7.30E-02	-2.07	-7.47 17p13.2
12 221728_x_a	t	-5.56	1.34E-04	2.22E-01	-2.08	-7.29
13 206544_x_a	t SMARCA2	-2.35	2.63E-05	9.78E-02	-1.92	-6.90 9p22.3
14 204332_s_a	t AGA	-2.17	3.07E-04	3.07E-01	-1.99	-6.88 4q32-q33
15 213983_s_a	t KIAA0648	-1.82	4.10E-04	3.15E-01	-1.96	-6.75 4p14
16 222466_s_a	t MRPL42	-1.99	1.05E-04	2.22E-01	-1.89	-6.72 12q22
17 243225_at		5.90	2.26E-04	2.75E-01	1.90	6.65
18 217847_s_a	t TRAP150	-1.82	1.97E-04	2.75E-01	-1.85	-6.53 1p34.3
19 205588_s_a	t FOP	-1.81	6.35E-05	2.13E-01	-1.81	-6.40 6q27
20 215424_s_a	t SNW1	-1.53	1.37E-04	2.22E-01	-1.90	-6.28 14q24.3
21 211762_s_a	t KPNA2	-1.49	1.40E-04	2.22E-01	-1.72	-6.15 17q23.1- q23.3
22 212742_at	ZNF364	-1.71	9.48E-04	3.65E-01	-1.79	-6.13 1q21.1
23 241304_at	PIK3C3	4.03		2.22E-01	1.70	6.10 18q12.3
24 200595_s_a		-1.69	1.46E-04	2.22E-01	-1.78	-6.07 10q26
25 217496_s_a	t IDE	-1.77		3.20E-01	-1.74	-6.07 10q23-q25
26 213827_at	SNX26	-2.08		2.22E-01	-1.68	-6.04 19q13.12
27 241114_s_a		-3.21		4.30E-01	-1.92	-6.02
28 243852_at	CGI-59	-1.97		4.14E-01	-1.85	-6.01 7q34
29 219600_s_a		-1.79		2.22E-01	-1.68	-6.00 21q22.11
30 218350_s_a		-2.04		2.22E-01	-1.64	-5.89 6p22.1
31 204082_at	PBX3	-2.08		2.75E-01	-1.74	-5.87 9q33-q34
32 234204_at		5.84		2.22E-01	1.62	5.84
33 203772_at	BLVRA	-2.96		3.07E-01		-5.82 7p14-cen
34 224444_s_a		-2.51		2.64E-01		-5.81 1q32.2
35 201532_at	PSMA3	-1.79		2.75E-01		-5.79 14q23
36 221191_at	DKFZP434A0131			2.22E-01	-1.60	-5.75 7q11.23- q21.1
37 205899_at	CCNA1	-3.38		4.49E-01		-5.69 13q12.3- q13
38 209190_s_a		-2.25		4.02E-01		-5.67 5q31
39 208905_at	CYCS	-1.83		3.19E-01		-5.65 7p15.2
40 229940_at	FLJ23027	-1.49		3.57E-01		-5.61 14q32.31
41 212438_at	RY1	-1.85		2.75E-01		-5.56 2p13.1
42 209739_s_a	at DXS1283E	-5.90	2.50E-02	4.81E-01	-2.33	-5.54 Xp22.3

43 210012_s_at	EWSR1	-3.37	2.35E-03	4.14E-01	-1.63	-5.48 22q12.2	
44 202602_s_at	HTATSF1	-1.87	1.32E-03	4.02E-01	-1.57	-5.43 Xq26.1- q27.2	
45 212863_x_at	CTBP1	-1.54	3.13E-04	3.07E-01	-1.51	-5.42 4p16	
46 208308_s_at	GPI	<i>-</i> 2.05	7.68E-04	3.57E-01	-1.53	-5.37 19q13.1	
47 214218_s_at		-4.89	4.29E-03	4.28E-01	-1.63	-5.33	
48 203396_at	PSMA4	-1.81	2.55E-04	2.95E-01	-1.47	-5.29 15q24.1	
49 235930_at		3.24	3.40E-04	3.07E-01	1.51	5.29	
50 227874_at		4.52	4.51E-04	3.20E-01	1.58	5.29	

2.2 D835 versus Status 1

#	affy id	HUGO name	fc	o o	1	stn t	Map
	1 207198_s_at	LIMS1	-1.91	8.16E-05	3.42E-01	-1.32	Location -5.69 2q12.2
	2 211081_s_at	MAP4K5	-2.95	3.19E-05	3.42E-01	-1.14	-5.35 14q11.2- q21
	3 238214_at		3.50	9.24E-05	3.42E-01	1.15	5.22
	4 212055_at	DKFZP586M1523	-2.30	2.99E-04	3.42E-01	-1.14	-4.86 18q12.1
	5 223699_at	CPGL2	2.48	2.62E-04	3.42E-01	1.08	4.81 18q22.3
	6 201606_s_at	PWP1	-2.17	1.48E-04	3.42E-01	-1.03	-4.76 12q24.11
	7 223564_s_at	GNB1L	-2.32	1.33E-04	3.42E-01	-1.01	-4.72 22q11.2
	8 240969_at		1.87	2.30E-04	3.42E-01	1.03	4.70
	9 225784_s_at	HCA127	-2.60	1.86E-04	3.42E-01	-1.01	-4.68 Xq11.1
	10 231527_at		1.80	1.55E-04	3.42E-01	1.00	4.67
	11 210208_x_at	BAT3	-1.62	4.50E-04	3.42E-01	-1.06	-4.62 6p21.3
	12 222573_s_at	SAV1	-2.46	3.35E-04	3.42E-01	-0.98	-4.50 14q13-q23
	13 242563_at		2.60	3.41E-04	3.42E-01	0.98	4.49
	14 236187_s_at	MGC41939	2.19	4.58E-04	3.42E-01	0.96	4.39 6q21
	15 244078_at		2.44	3.83E-04	3.42E-01	0.94	4.36
	16 228268_at	FMO2	1.83	1.04E-03	3.42E-01	1.04	4.34 1q23-q25
	17 228278_at		-3.69	7.64E-04	3.42E-01	-1.01	-4.33
	18 205703_at	ATP6V0A2	2.77	1.03E-03	3.42E-01	1.03	4.32 12q24.31
	19 229478_x_at	BIVM	-3.40	5.04E-04	3.42E-01	-0.94	-4.30 13q32- q33.1
	20 214114_x_at	FASTK	-1.50	4.96E-04	3.42E-01	-0.94	-4.30 7q35
	21 47571_at	ZNF236	1.88	8.03E-04	3.42E-01	0.97	4.27 18q22-q23
	22 213872_at	FLJ12619	-1.75	4.75E-04	3.42E-01	-0.92	-4.25 6p22.1
	23 221263_s_at	SF3b10	-1.72	7.90E-04	3.42E-01	-0.96	-4.24 6q24.1
	24 216503_s_at		-2.04	4.97E-04	3.42E-01	-0.92	-4.24
	25 211228_s_at	RAD17	-1.52	4.55E-04	3.42E-01	-0.91	-4.24 5q13
	26 229650_s_at	MGC2747	-1.70	5.58E-04	3.42E-01	-0.92	-4.21 19p13.11
	27 237536_at		3.35	6.46E-04	3.42E-01	0.93	4.21
	28 203522_at	CCS	-3.32	7.50E-04	3.42E-01	-0.95	-4.21 11q13
	29 223042_s_at	HCBP6	-1.73	4.80E-04	3.42E-01	-0.90	-4.21 Xq28
	30 242052_at		1.82	7.87E-04	3.42E-01	0.94	4.20
	31 241891_at		2.03	8.32E-04	3.42E-01	0.93	4.18
	32 240785_at		1.86	5.73E-04	3.42E-01	0.90	4.17
	33 208756_at	EIF3S2	-1.34	5.73E-04	3.42E-01	-0.90	-4.16 1p34.1

34 208879_x_at	C20orf14	-2.09	5.55E-04	3.42E-01	-0.87	-4.10 20q13.33	
35 240493_at		1.92	1.56E-03	3.42E-01	0.98	4.10	
36 227553_at	P101-PI3K	2.90	1.46E-03	3.42E-01	0.95	4.07 17p13.1	
37 234204_at		2.32	1.45E-03	3.42E-01	0.95	4.07	
38 201182_s_at	CHD4	-2.20	9.17E-04	3.42E-01	-0.89	-4.06 12p13	
39 213961_s_at	TAF6L	1.69	8.16E-04	3.42E-01	0.88	4.05 11q12.2	
40 234754_at		1.68	1.04E-03	3.42E-01	0.90	4.04	
41 230280_at	TRIM9	1.56	1.31E-03	3.42E-01	0.91	4.01 14q21.3	
42 202143_s_at	COP9	-1.54	7.23E-04	3.42E-01	-0.85	-3.99,2q37.3	
43 238589_s_at		1.78	8.08E-04	3.42E-01	0.86	3.98	
44 211630_s_at	GSS	-1.73	8.22E-04	3.42E-01	-0.85	-3.96 20q11.2	
45 233043_at	LOC221814	2.26	1.97E-03	3.42E-01	0.94	3.95 7p21.2	
46 222519_s_at	ESRRBL1	-1.75	1.32E-03	3.42E-01	-0.89	-3.94 3q13.12	
47 231585_at	CHAC	2.32	1.75E-03	3.42E-01	0.90	3.91 9q21	
48 243303_at		2.48	2.54E-03	3.42E-01	0.95	3.89	
49 222648_at	FLJ20748	2.56	1.96E-03	3.42E-01	0.90	3.88 17q25.3	
50 237671_at		1.75	9.83E-04	3.42E-01	0.83	3.88	

2.3 D835 versus Status 2

# affy id	HUGO name	fc	p (9	stn t	Map	
1 208756_at	EIF3S2	-1.46	1.26E-07	4.14E-03	-1.37	Location -7.32 1p34.1	
2 221664_s_at	F11R	-2.58	2.28E-06	3.74E-02	_	-6.05 1q21.2- q21.3	
3 229478_x_at	BIVM	-4.13	1.63E-05	1.38E-01	-1.00	-5.31 13q32- q33.1	
4 243852_at	CGI-59	-2.42	3.29E-05	1.38E-01	-1.00	-5.18 7q34	
5 205210_at	TGFBRAP1	-3.28	3.68E-05	1.38E-01	-0.95	-5.04 2q12.1	
6 230528_s_at	MGC2752	-2.32	3.71E-05	1.38E-01	-0.94	-5.03 19p13.2	
7 202427_s_at	DKFZP564B167	-1.65	3.09E-05	1.38E-01	-0.93	-5.00 1q24	
8 223176_at	MGC14254	-2.78	3.35E-05	1.38E-01	-0.93	-4.99 6p21.2	
9 200066_at - HG-U133B	IK	-1.49	3.97E-05	. 1.38E-01	-0.93	-4.96 5q31.3	
10 208420_x_at	SUPT6H	-1.89	5.38E-05	1.60E-01	-0.94	-4.92 17q11.2	
11 222451_s_at	ZDHHC9	-3.12	4.22E-05	1.38E-01	-0.91	-4.89	9
12 227669_at	•	-1.88	6.28E-05	1.67E-01	-0.92	-4.83	
13 227860_at	CPXM	-3.48	8.14E-05	1.67E-01	-0.90	-4.75 20p12.3- p13	
14 212694_s_at	PCCB	-1.88	7.58E-05	1.67E-01	-0.88	-4.70 3q21-q22	
15 239683_at	CLYBL	1.65	6.97E-05	1.67E-01	0.87	4.69	
16 221809_at	KIAA1464	-3.39	1.62E-04	1.77E-01	-0.96	-4.66 16q21 ·	
17 217785_s_at	YKT6	-2.30	1.00E-04	1.70E-01	-0.87	-4.65 7p15.1	
18 201507_at	PFDN1	-1.50	7.92E-05	1.67E-01	-0.86	-4.65 5q31	
19 219869_s_at	BIGM103	-1.70	1.27E-04	1.76E-01	-0.88	-4.64 4q22-q24	
20 234766_at		2.20	3.21E-04	2.03E-01	0.93	4.59	
21 223364_s_at	DDX37	-3.17	9.42E-05	1.70E-01	-0.85	-4.59 12q24.31	
22 218367_x_at	USP21	-2.12	9.65E-05	1.70E-01	-0.85	-4.58 1q22	
23 211503_s_at	RAB14	-1.65	1.04E-04	1.70E-01	-0.85	-4.57 9q32- q34.11	

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24 203597_s_at	WBP4	-1.67	1.40E-04	1.76E-01	-0.86	-4.56 13q13.3
25 219141_s_at	FLJ20294	-2.33	1.22E-04	1.76E-01	-0.84	-4.51 11p11.12
26 224821_at	MGC15429	-1.90	1.35E-04	1.76E-01	-0.84	-4.48 3p21.31
27 202122_s_at	TIP47	-1.53	1.26E-04	1.76E-01	-0.83	-4.47 19p13.3
28 213190_at	COG7	-3.02	1.35E-04	1.76E-01	-0.83	-4.45 16p12.3
29 212742_at	ZNF364	-1.65	1.46E-04	1.77E-01	-0.82	-4.42 1q21.1
30 209179_s_at	LENG4	-2.04	1.56E-04	1.77E-01	-0.82	-4.41 19q13.4
31 235040_at	DKFZp761H0421	-2.95	3.06E-04	2.03E-01	-0.91	-4.40 17q21.2
32 207223_s_at	ROD1	-1.39	2.33E-04	2.03E-01	-0.85	-4.39 9q32
33 228495_at		-1.76	1.61E-04	1.77E-01	-0.81	-4.38
34 224914_s_at	CIP29	-1.65	2.64E-04	2.03E-01	-0.83	-4.35 12q13.13
35 241813_at	MBD1	-2.62	5.08E-04	2.17E-01	-0.87	-4.34 18q21
36 202593 s_at	MIR16	-1.78	1.88E-04	1.96E-01	-0.81	-4.34 16p12-
				4.00=04	0.04	p11.2
37 201175_at	CGI-31	-1.70	1.91E-04	1.96E-01	-0.81	-4.33 11cen- q22.3
38 215710_at	SIAT4C	-3.32	3.55E-04	2.03E-01	-0.89	-4.33 11q23-q24
39 208962_s_at	FADS1	-3.74	2.81E-04	2.03E-01	-0.84	-4.32 11q12.2-
40.004000	EL 140000	-1.54	2.00E-04	1.99E-01	-0.80	q13.1 -4.30 5q33.1
40 224068_x_at	FLJ10290		2.00E-04 2.19E-04	2.03E-01	-0.80	-4.28 19q13.13
41 224913_s_at	TIM50L	-2.52		2.03E-01	-0.79	-4.27 20q13.32
42 221499_s_at	NPEPL1	-1.58	2.17E-04			-4.27 20q13.32 -4.25 3p21.31
43 201284_s_at	APEH	-2.30	2.60E-04	2.03E-01	-0.80	•
44 201932_at	MUF1	-2.44	2.58E-04	2.03E-01	-0.80	-4.25 1p33
45 220996_s_at	C1orf14	2.90	8.82E-04	2.45E-01	0.89	4.25 1q25
46 239860_at		1.72	1.26E-03	2.64E-01	0.94	4.23
47 222527_s_at	FLJ10290	-1.76	2.56E-04	2.03E-01	-0.78	-4.21 5q33.1
48 225937_at		-2.63	2.58E-04		-0.78	-4.21
49 228444_at	ARRB1	-2.81	3.44E-04	2.03E-01	-0.79	-4.19 11q13
50 226445_s_at	TRIM41	-1.47	3.52E-04	2.03E-01	-0.80	-4.19 5q35.3

2.4 D835 versus Status 3

#	affy id	HUGO name	fc	р	q	stn	t Map Location
	1 209179 s_at	LENG4	-2.52	3.15E-08	6.93E-04	-1.12	-7.01 19q13.4
	2 205227_at	IL1RAP	-3.99	2.23E-07	2.46E-03	-1.03	-6.38 3q28
	3 213800_at	HF1	-7.26	1.29E-06	5.40E-03	-1.00	-5.99 1q32
	4 208962_s_at	FADS1	-3.60	7.59E-07	5.40E-03	-0.95	-5.94 11q12.2- q13.1
	5 223364_s_at	DDX37	-3.78	9.89E-07	5.40E-03	-0.94	-5.87 12q24.31
	6 201242_s_at	ATP1B1	-2.95	1.52E-06	5.40E-03	-0.92	-5.72 1q22-q25
	7 233013_x_at		-1.54	1.96E-06	5.40E-03	3 -0.92	-5.68
	8 238959_at	LOC113251	-2.66	1.86E-06	5.40E-03	3 -0.91	-5.65 12q13.12
	9 235852_at		-6.81	3.55E-06	7.40E-03	3 -0.94	-5.63
1	 l0 209899_s_at	SIAHBP1	-1.52	1.14E-05	8.73E-03	3 -0.96	-5.62 8q24.2-qtel
	11 209392 at	ENPP2	-5.76	4.03E-06	7.40E-03	3 -0.95	-5.61 8q24.1
	12 208996_s_at	POLR2C	-1.52	3.99E-06	7.40E-03	3 -0.90	-5.56 16q13-q21
	13 211182_x_at		-3.75	2.72E-06	6.65E-0	3 -0.89	-5.53

						•
14 225233_at		-5.57	7.66E-06	8.23E-03	-0.92	-5.40
15 206574_s_at	PTP4A3	- 5.41	4.95E-06	8.23E-03	-0.88	-5.40
16 200820_at	PSMD8	-1.71	6.01E-06	8.23E-03	-0.86	-5.34 19q13.13
17 220974_x_at	BA108L7.2	-2.32	5.41E-06	8.23E-03	-0.86	-5.34 10q24.31
18 201932_at	MUF1	-2.30	6.83E-06	8.23E-03	-0.86	-5.33 1p33
19 240969_at		2.04	6.94E-05	1.52E-02	0.97	5.31
20 236269_at	LOC89887	-1.73	5.77E-06	8.23E-03	-0.85	-5.29 19
21 219254_at	FLJ22222	-4.20	8.42E-06	8.23E-03	-0.87	-5.27 17q25.3
22 217226_s_at	BA108L7.2	-2.13	6.51E-06	8.23E-03	-0.85	-5.27 10q24.31
23 214697_s_at	ROD1	-1.98	3.95E-05	1.23E-02	-0.91	-5.25 9q32
24 208791_at	CLU	-11.11	1.29E-05	8.73E-03	-0.90	-5.24 8p21-p12
25 218118_s_at	TIMM23	-1.64	1.21E-05	8.73E-03	-0.85	-5.20 10q11.21- q11.23
26 200619_at	SF3B2	-1.83	2.57E-05	1.08E-02	-0.88	-5.20 11q13.1
27 201243_s_at	ATP1B1	-2.55	8.08E-06	8.23E-03	-0.83	-5.20 1q22-q25
28 212742_at	ZNF364	-1.53	3.12E-05	1.18E-02	-0.88	-5.20 1q21.1
29 200721_s_at	ACTR1A	-1.68	7.85E-06	8.23E-03	-0.83	-5.20 10q24.32
30 221664_s_at	F11R	-2.29	1.66E-05	8.74E-03	-0.86	-5.19 1q21.2- q21.3
31 221754_s_at	CORO1B	-4.24	2.64E-05	1.08E-02	-0.87	-5.17 11q13.1
32 237524_at		2.47	4.29E-04	3.21E-02	1.21	5.17
33 201723_s_at	GALNT1	-1.45	5.21E-05	1.37E-02	-0.90	-5.16 18q12.1
34 225257_at	MGC20255	-1.79	3.59E-05	1.23E-02	-0.88	-5.16 19q13.13
35 221809_at	KIAA1464	-2.79	1.21E-05	8.73E-03	-0.85	-5.16 16q21
36 212968_at	RFNG	-1.57	8.93E-06	8.23E-03	-0.83	-5.16 17q25
37 202111_at	SLC4A2	-5.58	1.57E-05	8.74E-03	-0.88	-5.16 7q35-q36
38 243579_at	MSI2	-3.43	8.96E-06	8.23E-03	-0.82	-5.15 17q23.1
39 217849_s_at	CDC42BPB	-4.41	1.49E-05	8.74E-03	-0.83	-5.12 14q32.3
40 211501_s_at	EIF3S9	-1.84	1.11E-05	8.73E-03	-0.83	-5.12 7p22.3
41 228678_at		-4.01	1.14E-05	8.73E-03	-0.83	-5.12
42 230482_at		2.49	1.64E-04	2.05E-02	0.98	5.11
43 208761_s_at	UBL1	-1.45	1.31E-05	8.73E-03	-0.83	-5.11 2q33
44 209739_s_at	DXS1283E	-3.12	1.07E-05	8.73E-03	-0.82	-5.09 Xp22.3
45 238589_s_at	•	1.62	7.91E-05	1.61E-02	0.90	5.08
46 221499_s_at	NPEPL1	-1.73	1.31E-05	8.73E-03	-0.81	-5.04 20q13.32
47 208756_at	EIF3S2	-1.36	1.53E-05	8.74E-03	-0.81	-5.04 1p34.1
48 201526_at	ARF5	-1.71	1.37E-05	8.74E-03	-0.80	-5.01 7q31.3
49 207223_s_at	ROD1	-1.37	1.52E-05	8.74E-03	-0.81	-5.01 9q32
50 223176_at	MGC14254	-2.55	1.61E-05	8.74E-03	-0.80	-4.99 6p21.2

2.5 D835 versus Status 4

#	affy id	HUGO name	fc (р	P	stn	t	Map Location
	1 201242_s_at	ATP1B1	-4.39	1.51E-08	3.57E-04	-3.73	}	-14.27 1q22-q25
	2 218983_at	LOC51279	-3.66	7.69E-05	8.25E-02	-2.73	3	-9.33 12p13.31
	3 221942_s_at	GUCY1A3	-5.20	5.27E-05	7.94E-02	-2.63	}	-9.19 4q31.1- q31.2
	4 201005_at	CD9 .	-10.35	4.65E-04	1.27E-01	<i>-</i> 3.10)	-9.07 12p13.3

5 210425_x_at	GOLGIN-67	-3.52	5.58E-05	7.94E-02	-2.40	-8.54 15q11.2
6 220974 x_at	BA108L7.2	-4.34	3.14E-04	1.24E-01	-2.63	-8.46 10q24.31
7 201243_s_at	ATP1B1	-3.98	1.93E-04	1.06E-01	-2.34	-7.99 1q22-q25
8 230589_at	,,,,,	-3.36	1.13E-05	6.65E-02	-1.97	-7.53
9 205081_at	CRIP1	-3.83	3.07E-05	7.28E-02	-2.00	-7.48 7q11.23
10 222138_s_at	WDR13	-3.08	7.46E-05	8.25E-02	-2.03	-7.40 Xp11.23
11 217226_s_at	BA108L7.2	-3.56	1.07E-03	1.36E-01	-2.46	-7.32 10q24.31
12 226959_at	D/ (1002	-5.23	6.01E-04	1.27E-01	-2.26	-7.32
13 201069_at	MMP2	-5.72	2.24E-04	1.06E-01	-2.10	-7.32 16q13-q21
14 202111_at	SLC4A2	-14.46	1.90E-03	1.44E-01	-2.90	-7.18 7q35-q36
15 235391_at	LOC137392	-3.80	6.39E-05	7.94E-02	-1.94	-7.16 8q21.3
16 204073_s_at	C11orf9	-3.61	2.14E-04	1.06E-01	-2.03	-7.13 11q12-
17 213983_s_at	KIAA0648	-1.87	2.28E-05	7.28E-02	-1.87	q13.1 -7.10 4p14
17 213903_s_at	TRIM16	-2.78	4.14E-04	1.27E-01	-2.09	-7.09 17p11.2
19 204541_at	PTP4A3	-13.49	1.75E-03	1.43E-01	-2.58	-7.03
— —	FIFAAS	-3.00	1.65E-04	1.06E-01	-1.95 [°]	-7.00
20 212221_x_at 21 225178_at	FLJ00166	-2.29	9.70E-06	6.65E-02	-1.81	-6.99 3q27.2
-	MGC45806	-5.50	7.13E-04	1.30E-01	-2.14	-6.98 1p35.2
22 45297_at	WGC43000	-2.06	1.10E-05	6.65E-02	-1.78	-6.90
23 212608_s_at	AQP3	-6.18	8.49E-04	1.32E-01	-2.06	-6.71 9p13
24 39248_at	COX11	-2.51	2.50E-05	7.28E-02	-1.72	-6.62 17q22
25 211727_s_at 26 203897_at	LOC57149	-2.79	4.02E-04	1.27E-01	-1.88	-6.58 16p11.2
_	LOG5/ 149	-3.17	1.96E-04	1.06E-01	-1.81	-6.56
27 212605_s_at 28 224901_at		-3.91	1.62E-03	1.43E-01	-2.15	-6.51
29 219251_s_at	FLJ10300	-2.82	2.75E-05	7.28E-02	-1.69	-6.46 7q36.3
30 230864_at	MGC42105	3.15	5.41E-05	7.94E-02	1.72	6.38 5p11
30 230604_at	1013042103	-1.99	3.41E-05	7.28E-02	-1.64	-6.34
31 227227_at 32 216842_x_at		2.25	3.28E-05	7.28E-02	1.62	6.27
32 210042_x_at	ST7L	-2.47	3.23E-05	7.28E-02	-1.61	-6.23 1p13.1
34 202371_at	FLJ21174	-2.33	6.28E-05	7.94E-02	-1.66	-6.21 Xq22.1
35 202371_at	I LJZ I I I T	-2.29	7.15E-05	8.25E-02	-1.62	-6.19
36 202436_x_at	PTP4A3	-2.23 -2.61	1.70E-03	1.43E-01	-1.96	-6.15
37 243526 at	FIFTAS	-18.10	3.64E-03	1.51E-01	-2.54	-6.08
38 201613_s_at	RUVBL1	-2.47	3.39E-04	1.27E-01	-1.68	-6.07 3q21
39 224093_at	IFNK	13.22	1.75E-04	1.06E-01	1.80	6.06
40 204247_s_at	CDK5	-2.75	5.88E-05	7.94E-02	-1.59	-6.05 7q36
40 204247_s_at 41 202247_s_at	MTA1	-1.61	2.23E-04	1.06E-01	-1.62	-6.01 14q32.3
42 225010 at	D10S170	-2.51	4.93E-05		-1.55	•
42 2230 To_at 43 208978_at	CRIP2	-16.29		1.51E-01	-2.28	-5.98 14q32.3
44 227431_at	OIMI Z	-2.35		1.37E-01	-1.76	-5.91
45 201307_at	FLJ10849	-2.93			-1.71	-5.86 4q21.21
45 201307_at 46 242313_at	1 2310049	-2.30 -2.17			-1.58	•
46 2423 13_at 47 222244_s_at	FLJ20618	-2.17 -1.75			-1.52	
47 222244_s_at 48 233935_at	1 1320010	4.08			1.53	•
_	CHRNA7	-2.43			-1.52	
49 210123_s_at	GMEB1	-2. 4 3 -2.96			-1.54	
50 220938_s_at	GIVIED I	-2.30	6.1 VL-U4	1.16L-V1	1.47	0.12 1p00.2

2.6 D835 versus Status 5

# affy id	HUGO name	fc r) q	,	stn t	Map Location	
1 215732_s_at	DTX2	2.65	2.86E-05	2.38E-01	1.56	6.18 7q11.23	
2 201523_x_at	UBE2N	-1.49	5.01E-05	2.38E-01	-1.48	-5.90 12q22	
3 209531_at	GSTZ1	-3.54	7.08E-05	2.38E-01	-1.49	-5.87 14q24.3	
4 219869_s_at	BIGM103	-2.03	9.47E-05	2.38E-01	-1.50	-5.85 4q22-q24	
5 218489_s_at	ALAD	-2.44	5.43E-04	2.38E-01	-1.48	-5.47 9q34	
6 229976_at		3.20	1.51E-04	2.38E-01	1.38	5.44	
7 221370_at	ZNF73	3.82	1.63E-04	2.38E-01	1.39	5.38 22p	
8 208007_at		5.50	4.11E-04	2.38E-01	1.48	5.27	
9 240935_at		2.91	3.31E-04	2.38E-01	1.38	5.18	
10 47571_at	ZNF236	2.12	3.15E-04	2.38E-01	1.33	5.10 18q22-q23	
11 207842_s_at	MLN51	-1.62	1.83E-04	2.38E-01	-1.28	-5.10 17q11- q21.3	
12 233752_s_at	ATBF1	1.48	2.00E-04	2.38E-01	1.28	5.08 16q22.3- q23.1	
13 220996_s_at	C1orf14	4.04	3.21E-04	2.38E-01	1.32	5.06 1q25	
14 243579_at	MSI2	-3.64	1.19E-03	2.38E-01	-1.37	-4.97 17q23.1	
15 235838_at		1.89	2.79E-04	2.38E-01	1.25	4.95	
16 214324_at	GP2	3.16	2.81E-04	2.38E-01	1.26	4.94 9q21.11- q21.2	
17 232184_at	ALS2	-2.15	5.41E-04	2.38E-01	-1.27	-4.92 2q33.2	
18 227431_at		-2.01	1.22E-03	2.38E-01		-4.90	
19 224218_s_at	TRPS1	3.85	5.82E-04	2.38E-01		4.88 8q24.12	_
20 222451_s_at	ZDHHC9	-3.05	4.38E-04	2.38E-01		-4.87 9)
21 240016_at		3.37	5.17E-04	2,38E-01		4.82	
22 214408_s_at	RFPL3S	2.55	4.74E-04	2.38E-01		4.75 22q12.3	
23 243893_at		3.39	3.36E-04	2.38E-01		4.71	
24 208573_s_at	OR2H3	2.43	4.02E-04	2.38E-01		4.70 6p21.3	
25 205353_s_at	PBP	-1.99	3.82E-04	2.38E-01		-4.69 12q24.23	
26 200820_at	PSMD8	-1.93	2.28E-03	2.38E-01		-4.68 19q13.13	
27 229352_at	MGC24663	7.93		2.38E-01		4.68 15q22.31	
28 201329_s_at	ETS2	-1.67	1.09E-03	2.38E-01		-4.67 21q22.2	
29 221535_at	FLJ11301	-1.80	6.71E-04	2.38E-01	-1.18	-4.61 3q29	
30 213244_at	SCAMP-4	-2.28				-4.61 19p13.3	
31 240910_at		2.77				4.60	
32 219791_s_at	FLJ11539	2.80				4.58 4q34.1	
33 236676_at		2.57				4.57	
34 237503_at	AIT	2.86		2.38E-01		4.57 12q23.3	
35 215537_x_at	DDAH2	-1.75	1.11E-03			-4.57 6p21.3	
36 206301_at	TEC	-4.70	5.23E-03	2.38E-01		-4.55 4p12	
37 244540_at		5.21	1.17E-03	2.38E-01	1.27	4.54	
38 201524_x_at	UBE2N	-1.51				-4.54 12q22	
39 220851_at	PRO1600	3.24				4.53 9p24.2	
40 234431_at		2.07				4.53	
41 225233_at		-3.67			•	-4.51	
42 202799_at	CLPP	-1.59	5.43E-04	2.38E-01	-1.12	-4.46 19p13.3	

43 220011_at	MGC2603	1.52	5.47E-04	2.38E-01	1.11	4.45 1p35.3
44 219766_at	MGC4093	-2.96	7.46E-04	2.38E-01	-1.13	-4.45 19q13.13
44 219700_at 45 201757_at	NDUFS5	 _	6.05E-04	2.38E-01	-1.11	-4.45 1p34.2-p33
46 216921_s_at	KRTHA5	• • • •	6.28E-04	2.38E-01	1.12	4.44 17q12-q21
46 216921_s_at 47 228421_s_at	EFEMP1		6.32E-04	2.38E-01	1.12	4.44 2p16
47 220421_s_at 48 243010_at	MSI2		8.74E-04	2.38E-01	-1.15	-4.43 17q23.1
49 237411_at	LOC153516		5.95E-04	2.38E-01	1.11	4.43 5q12.2
50 205247_at	NOTCH4	•	6.25E-04	2.38E-01	1.11	4.42 6p21.3
50 203241_at	11010111	1.00				

2.7 D835 versus normal

#	affy id	HUGO name	fc	p	q	S	stn t	Map Location
	1 235040_at	DKFZp761H0421	-2	.50	9.69E-09	3.57E-04	-0.78	-6.53 17q21.2
	2 222425_s_at	DKFZP586F1524	-2	.50	4.05E-06	1.24E-02	-0.71	-5.53 17q11.1
	3 200721_s_at	ACTR1A		.48	3.45E-06	1.18E-02	-0.69	-5.48 10q24.32
	4 221809 at	KIAA1464	-3	.80	8.68E-07	9.88E-03	-0.66	-5.45 16q21
	5 236140_at	GCLM	-3	.83	9.20E-07	9.88E-03	-0.65	-5.42 1p22.1
	6 208420_x_at	SUPT6H	-1	.79	1.29E-06	9.88E-03	-0.64	-5.35 17q11.2
	7 202974_at	MPP1	-1	.75	1.34E-06	9.88E-03	-0.63	-5.31 Xq28
	8 219254_at	FLJ22222	-3	3.00	1.66E-06	1.01E-02	-0.63	-5.28 17q25.3
	9 208996_s_at	POLR2C	-1	.39	3.95E-05	2.79E-02	-0.74	-5.25 16q13-q21
	10 211003_x_at	TGM2	-6	3.34	2.38E-06	1.01E-02	-0.64	-5.20 20q12
	11 210248_at	WNT7A	-2	2.55	2.17E-06	1.01E-02	-0.62	-5.20 3p25
	12 213714_at	CACNB2	-3	3.28	2.48E-06	1.01E-02	-0.61	-5.14 10p12
	13 224947_at	RNF26	-'	1.51	4.62E-05	2.94E-02	-0.71	-5.13 11q23
	14 225099_at	LOC200933	_'	1.85	9.76E-06	2.00E-02	-0.63	-5.07 3q29
	15 210639_s_at	APG5L	 '	1.38	1.80E-05	2.30E-02	-0.65	-5.06 6q21
	16 210036_s_at	KCNH2	-:	2.85	3.52E-06	1.18E-02	-0.60	-5.05 7q35-q36
	17 211228_s_at	RAD17	-	1.45	4.46E-05	2.94E-02	-0.68	-5.02 5q13
	18 227669_at		_	1.55	1.68E-05	2.30E-02	-0.64	-5.01
	19 202593_s_at	MIR16	_	1.85	5.95E-06	·1.45E-02	-0.61	-5.01 16p12- p11.2
	20 210571_s_at	CMAH	-	1.99	1.44E-05	2.30E-02	-0.63	-5.01 6p21.32
	21 237403_at	GFI1B	_	4.81	5.06E-06	1.41E-02	-0.60	-4.97 9q34.13
	22 200070_at - HG-U133B	CGI-57	_	1.57	1.60E-05	2.30E-02	-0.63	-4.97 2q35
	23 202427_s_at	DKFZP564B167	-	1.47	2.96E-05	2.56E-02	-0.65	-4.96 1q24
	24 215054_at	EPOR	-	2.81	5.37E-06	1.41E-02		-4.95 19p13.3- p13.2
	25 205262_at	KCNH2	-	4.98	6.31E-06	1.45E-02	-0.58	-4.89 7q35-q36
	26 200066_at - HG-U133B	IK	•	-1.39	1.03E-04	3.93E-02		-4.89 5q31.3
•	27 212100_s_at	KIAA1649	•	-1.25				-4.82 22q13.2
	28 223818_s_at	HBXAP	•	-2.73				-4.80 11q13.3
	29 231724_at	CRSP7	•	-2.81	9.19E-06			-4.80 19p13.11
	30 222527_s_at	FLJ10290	•	-1.64	6.37E-05			-4.79 5q33.1
	31 212598_at	ALFY		-2.62				-4.76 4q21.3
	32 215654_at	BCAT2		-2.21	2.18E-05	2.30E-02	2 -0.59	-4.76 19q13

33 223176_at	MGC14254	-2.07	9.74E-05	3.93E-02	-0.65	-4.73 6p21.2
34 211598_x_at		-2.99	1.63E-04	4.71E-02	-0.68	-4.72
35 230285_at	DKFZp313A2432	-1.73	2.17E-05	2.30E-02	-0.58	-4.72 11p14.2
36 221499 s_at	NPEPL1	-1.49	8.40E-05	3.73E-02	-0.63	-4.70 20q13.32
37 241813_at	MBD1	-2.79	1.69E-04	4.83E-02	-0.67	-4.70 18q21
38 237215_s_at		-3.23	2.75E-05	2.56E-02	-0.58	-4.70
39 214446_at	ELL2	-3.99	1.38E-05	2.30E-02	-0.56	-4.70 5q14.3
40 225235_at	MGC14859	-2.18	1.35E-05	2.30E-02	-0.56	-4.69 5q35.3
41 209764_at		-2.87	1.45E-05	2.30E-02	-0.56	-4.67
42 212065_s_at	KIAA0570	-1.92	7.96E-05	3.58E-02	-0.62	-4.67 2p14
43 209179_s_at	LENG4	-1.73	1.07E-04	3.93E-02	-0.63	-4.67 19q13.4
44 202111_at	SLC4A2	-2.97	1.55E-05	2.30E-02	-0.55	-4.65 7q35-q36
45 205592_at	SLC4A1	-3.79	1.58E-05	2.30E-02	-0.55	-4.64 17q21-q22
46 202815_s_at	HIS1	-1.55	6.34E-05	3.30E-02	-0.60	-4.64 17q21.32
47 208916_at	SLC1A5	-2.07	2.02E-05	2.30E-02	-0.55	-4.62 19q13.3
48 236981_at		-6.30	2.13E-05	2.30E-02	-0.58	-4.61
49 202151_s_at	GDBR1	-2.24	3.26E-05	2.56E-02	-0.56	-4.60 9q34.3
50 208501_at	GFI1B	-2.98	2.71E-05	2.56E-02	-0.56	-4.60 9q34.13

2.8 Double versus Status 1

#	affy id	HUGO name	fc	р	q		stn	t	Map Location
	1 240676_at			3.54	6.52E-09	2.46E-04	3	.50	13.57
	2 222583_s_at	NUP50		2.48	5.24E-08	9.89E-04	3	3.09	11.70 22q13.31
	3 210820_x_at	COQ7		1.61	2.08E-07	2.62E-03	2	2.70	10.44 16p13.11- p12.3
	4 205282_at	LRP8		2.12	5.17E-07	4.88E-03	2	2.49	9.46 1p34
	5 223564_s_at	GNB1L		-5.22	8.27E-07	6.24E-03	-2	2.39	-9.07 22q11.2
	6 220623_s_at	TSGA10		2.45	1.42E-06	6.68E-03	2	2.36	8.84 2q11.2
	7 215225_s_at	GPR17		2.56	9.92E-07	6.24E-03	3	2.29	8.77 2q21
	8 202228_s_at	SDFR1		2.36	1.19E-06	6.41E-03	3 2	2.29	8.71 15q22
	9 218728_s_at	HSPC163		2.05	2.86E-06	1.20E-02	2 2	2.26	8.39 1q42.12
	10 218438 s_at	EG1		1.73	2.93E-04	1.11E-01	1 2	2.32	8.27 4p16
	11 200595_s_at	EIF3S10		1.64	3.65E-06	1.38E-02	2 ` 2	2.11	7.97 10q26
	12 240354_at	MGC35033		1.99	8.25E-06	2.18E-02	2 2	2.19	7.78 12q13.11
	13 227064_at			1.37	6.80E-06	2.14E-02	2 '	1.98	7.64
	14 205180_s_at	ADAM8		3.07	1.40E-04	7.93E-02	2 2	2.06	7.59 10q26.3
	15 236898_at			4.98	1.24E-03	1.85E-0 ⁻	1 :	2.22	7.58
	16 222779_s_at	HSA277841		1.72	4.46E-06	1.53E-0	2	1.94	7.51 17p13.3
	17 221156_x_at	CPR8		2.01	2.67E-03	2.44E-0	1	2.27	7.41 15q21.1
	18 208700 s at	TKT		2.09	8.86E-06	2.18E-0	2	1.95	7.35 3p14.3
	19 217246_s_at	EPAG		4.10	1.88E-03	2.15E-0	1	2.19	7.35 X
	20 210118 s_at	IL1A		2.61	1.82E-04	8.92E-0	2	1.99	7.32 2q14
	21 244257_at			2.37	1.29E-04	7.93E-0	2	1.97	7.30
	22 204633_s_at	RPS6KA5		2.42	1.43E-04	7.93E - 0	2	1.96	7.27 14q31- q32.1
	23 206841_at	PDE6H		5.51	1.07E-02	3.72E-0	1	2.63	7.17 12p13

24 213656_s_at		1.67	1.66E-03	2.05E-01	2.09	7.11
25 236001_at		1.54	9.05E-06	2.18E-02	1.83	7.09
26 208374_s_at	CAPZA1	1.68	9.22E-06	2.18E-02	1.84	7.07 1p13.1
27 219445_at	GLTSCR1	1.64	1.15E-05	2.18E-02	1.84	7.01 19q13.3
28 234372_at		2.02	8.49E-05	5.96E-02	1.85	6.96
29 218109_s_at	FLJ14153	1.76	1.39E-05	2.38E-02	1.84	6.96 3q25.32
30 234598_at		1.64	1.15E-05	2.18E-02	1.79	6.93
31 214037_s_at	JM1	1.79	1.53E-05	2.49E-02	1.84	6.93 Xp11.23
32 237092_at		1.80	1.05E-05	2.18E-02	1.79	6.93
33 236737_at	FLJ31528	2.85	2.67E-05	3.36E-02	1.94	6.86 17q25.3
34 203983_at	TSNAX	1.91	1.16E-05	2.18E-02	1.77	6.86 1q42.1
35 205446_s_at	ATF2	2.07	1.26E-05	2.27E-02	1.76	6.80 2q32
36 239342_at	DGKZ	1.70	8.69E-05	5.96E-02	1.79	6.75 11p11.2
37 45714_at	HPIP	1.41	1.69E-05	2.55E-02	1.74	6.72 16p13.3
38 222673_x_at	LOC159090	1.51	1.59E-05	2.49E-02	1.73	6.71 Xq26.3
39 220419_s_at	USP25	1.74	1.20E-03	1.81E-01	1.89	6.62 21q11.2
40 219802_at	FLJ22028	1.50	2.94E-05	3.36E-02	1.72	6.62 12p12.1
41 230724_s_at	FLJ10726	1.57	1.98E-05	2.82E-02	1.71	6.61 11q23.2
42 236396_at		3.02	1.28E-03	1.85E-01	1.88	6.59
43 214038_at	CCL8	2.40	2.02E-05	2.82E-02	1.72	6.58 17q11.2
44 204614_at	SERPINB2	13.04	2.08E-02	4.32E-01	3.05	6.55 18q21.3
45 221481_x_at	HNRPD	1.38	6.54E-05	5.44E-02	1.71	6.52 4q21.1- q21.2
46 209476_at	TXNDC	1.70	2.91E-05	3.36E-02	1.74	6.52 14q21.3
47 218861_at	RNF25	3.50	1.65E-02	4.12E-01	2.57	6.51 2q35
48 238099_at	HSPA4	2.69	6.37E-05	5.44E-02	1.70	6.50 5q31.1- q31.2
49 218538_s_at	MRS2L	1.73	2.09E-05	2.82E-02	1.67	6.47 6p22.3- p22.1
50 214396_s_at	MBD2	2.04	2.76E-05	3.36E-02	1.71	6.47 18q21

2.9 Double versus Status 2

#	affy id	HUGO name	fc p		q	stn	t Map Location
	1 226245_at		1.61	1.26E-07	5.22E-03	1.87	8.69
	2 221728_x_at		4.65	4.96E-04	1.65E-01	2.03	8.18
	3 237548_at		2.07	4.43E-04	1.55E-01	1.95	7.96
	4 213911_s_at	H2AFZ	1.39	9.73E-07	1.08E-02	1.69	7.81 4q24
	5 220623_s_at	TSGA10	1.88	3.24E-07	5.22E-03	1.63	7.56 2q11.2
	6 208700_s_at	TKT	1.71	3.52E-07	5.22E-03	1.60	7.45 3p14.3
	7 203772_at	BLVRA	3.32	3.06E-04	1.27E-01	1.67	7.07 7p14-cen
	8 204083_s_at	TPM2	-11.16	1.21E-06	6 1.08E-02	2 -1.51	-6.95 9p13.2- p13.1
	9 241655_at		2.16	1.85E-06	1.17E-02	2 1.48	6.93
1	I0 214037_s_at	JM1	1.75	1.51E-08	1.12E-02	2 1.46	6.79 Xp11.23
1	l1 213827_at	SNX26	1.83	1.28E-05	3.57E-02	2 1.48	6.77 19q13.12
4	12 201464_x_at	JUN	1.69	2.85E-06	3 1.59E-02	2 1.41	6.59 1p32-p31
1	13 36552_at	DKFZP586P0123	1.43	1.51E-03	3 2.42E-0°	1 1.60	6.43 11q13.3

			54			•
14 210118_s_at	IL1A	2.48	9.02E-05	7.10E-02	1.44	6.43 2q14
15 219392_x_at	FLJ11029	1.71	3.68E-04	1.38E-01	1.50	6.43 17q23.2
16 214092_x_at	SFRS14	1.41	3.94E-06	1.60E-02	1.39	6.40 19p12
17 200595_s_at	EIF3S10	1.38	3.85E-06	1.60E-02	1.35	6.31 10q26
18 201382_at	SIP	1.78	3.78E-06	1.60E-02	1.34	6.30 1q24-q25
19 200030_s_at - HG-U133A	SLC25A3	-1.22	6.71E-05	7.10E-02	-1.39	-6.25 12q23
20 206841_at	PDE6H	3.84	9.83E-03	4.73E-01	1.87	6.24 12p13
21 239246_at		1.95	3.70E-05	6.60E-02	1.36	6.19
22 205962_at	PAK2	4.02	2.13E-02	6.01E-01	2.35	6.07 3q29
23 204332_s_at	AGA	1.83	7.64E-04	1.86E-01	1.42	6.01 4q32-q33
24 229697_at		1.51	2.44E-04	1.18E-01	1.37	6.01
25 215587_x_at		2.99	8.49E-03	4.52E-01	1.72	6.00
26 244125_at		-5.79	9.34E-06	3.46E-02	-1.30	-5.98
27 214630_at	CYP11B2	2.06	6.01E-04	1.73E-01	1.36	5.86 8q21-q22
28 208064_s_at	SIAT8C	-5.23	1.27E-05	3.57E-02	-1.26	-5.82 18q21.2
29 243613_at	MGC24039	1.77	1.22E-05	3.57E-02	1.24	5.78 12p11.21
30 242573_at		1.79	2.34E-04	1.16E-01	1.30	5.77
31 241536_at		1.84	1.21E-05	3.57E-02	1.23	5.77
32 211987_at	TOP2B	1.57	1.74E-03	2.62E-01	1.40	5.76 3p24
33 234809_at	HCA127	3.71	1.41E-02	5.27E-01	1.78	5.75 Xq11.1
34 AFFX-BioDn-5_	at - HG-U133A	1.35	7.88E-04	1.86E-01	1.34	5.72
35 208891_at	DUSP6	1.96	3.58E-05	6.60E-02	1.23	5.72 12q22-q23
36 232322_x_at	STARD10	-4.95	5.81E-05	7.10E-02	-1.23	-5.66 11q13
37 208892_s_at	DUSP6	2.12	1.83E-03	2.68E-01	1.37	5.66 12q22-q23
38 222984_at	PAIP2	-1.32	2.54E-04	1.18E-01	-1.27	-5.66 5q31.3
39 221952_x_at	KIAA1393	1.39	2.84E-05	6.60E-02	1.20	5.59 14q23.1
40 206614_at	GDF5	-2.83	7.00E-05	7.10E-02	-1.21	-5.56 20q11.2
41 200715_x_at	RPL13A	-1.31	6.18E-03	4.08E-01	-1.48	-5.55 19q13.3
42 215262_at		1.97	3.62E-05	6.60E-02	1.19	5.55
43 225248_at	SPPL2B	-3.23	3.17E-05	6.60E-02	-1.21	-5.46 19p13.3
44 231204_at	FLJ11331	-7.44	2.57E-05	6.60E-02	-1.17	-5.46 4q25
45 214826_at	DKFZp667B1218	2.02	2.41E-03	2.82E-01	1.33	5.43 3p21.2
46 232075_at	REC14	1.62	3.08E-05	6.60E-02	1.16	5.43 15q24.1
47 211747_s_at	LSM5	1.55	3.94E-04	1.43E-01	1.22	5.41 7p14.3
48 213975_s_at	LYZ	1.52	4.82E-05	7.10E-02	1.16	5.41 12q14.3
49 203597_s_at	WBP4	-1.56	3.55E-05	6.60E-02	-1.15	-5.39 13q13.3
50 209981_at	PIPPIN	2.17	1.75E-04	1.06E-01	1.19	5.38 22q13.2- q13.31

2.10 Double versus Status 3

#	affy id	HUGO name	fc	p	q	stn t	Map
							Location
	1 236737_at	FLJ31528	2.7	7 7.41E-1	3 2.90E-08	2.23	12.26 17q25.3
	2 220623_s_at	TSGA10	2.1	0 2.98E-1	2 5.83E-08	1.99	11.27 2q11.2
	3 205282_at	LRP8	1.7	3 1.64E-1	1 2.14E-07	1.96	11.04 1p34
	4 225385_s_at	LOC92906	2.6	1 1.50E-0	7 1.59E-04	2.06	10.96 2p22.2

		٥.	3	•		
5 201382_at	SIP	2.01	7.99E-10	3.91E-06	1.90	10.55 1q24-q25
6 222673_x_at	LOC159090	1.73	2.61E-08	4.65E-05	1.92	10.42 Xq26.3
7 231731_at	OTX2	1.93	2.68E-11	2.63E-07	1.81	10.23 14q21-q22
8 203983_at	TSNAX	1.86	2.27E-07	2.02E-04	1.83	9.79 1q42.1
9 218262_at	FLJ22318	1.64	1.00E-09	3.92E-06	1.73	9.68 5q35.3
10 241536_at		1.94	1.30E-08	3.01E-05	1.74	9.60
11 243280_at		1.76	3.00E-10	2.35E-06	1.69	9.51
12 225683_x_at	PHP14	2.53	3.64E-04	2.96E-02	2.01	9.23 9q34.3
13 239246_at		1.97	7.95E-04	4.97E-02	2.09	9.16
14 222779 s_at	HSA277841	1.54	6.58E-07	4.60E-04	1.71	9.15 17p13.3
15 214038_at	CCL8	2.14	5.93E-09	1.93E-05	1.63	9.08 17q11.2
16 242053_at		1.64	3.49E-07	2.85E-04	1.68	9.07
17 230438 at	TBX15	1.57	5.55E-10	3.10E-06	1.60	9.06 1p11.1
18 214092_x_at	SFRS14	1.41	4.78E-10	3.10E-06	1.60	9.02 19p12
19 243938_x_at	DNAH5	2.85	1.51E-04	1.68E-02	1.88	9.02 5p15.2
20 237852_at		1.81	6.01E-06	2.07E-03	1.69	8.80
20 237032_at 21 228322_at	C14orf35	2.41	9.71E-10	3.92E-06	1.55	8.77 14q22.2
21 220322_at 22 239405_at	0140100	1.71	5.41E-09	1.93E-05	1.55	8.70
23 213911_s_at	H2AFZ	1.45	6.43E-08	9.10E-05	1.56	8.62 4q24
23 213911_s_at 24 232856_at	1127(12	1.87	1.17E-05	3.28E-03	1.64	8.47
	El 144202		2.91E-06	1.27E-03		
25 220461_at	FLJ11383	1.72			1.58	8.40 1q42.2
26 226944_at	HTRA3	2.29	1.24E-04	1.44E-02	1.68	8.25 4p16.1
27 232075_at	REC14	1.85	1.41E-07	1.53E-04	1.49	8.19 15q24.1
28 233501_at	MACC4	1.61	8.20E-09	2.36E-05	1.45	8.16 0.45 5=42
29 240631_at	MASS1	1.56	9.05E-09	2.36E-05	1.45	8.15 5q13
30 238751_at		2.29	1.42E-08	3.09E-05	1.45	8.14
31 235766_x_at	DAOUA	1.96	8.58E-09	2.36E-05	1.43	8.09
32 234938_at	BACH1	2.02	1.57E-03	7.21E-02	1.88	8.09 21q22.11
33 242573_at	NO4 DD	2.03	4.71E-04		1.73	8.08
34 206245_s_at	NS1-BP	1.79	1.25E-05	3.42E-03	1.53	8.00 1q25.1- q31.1
35 234361_at		2.20	1.30E-04	1.49E-02	1.62	7.99
36 236396_at	•	3.48	3.47E-03	1.16E-01	2.00	7.98
37 221952_x_at	KIAA1393	1.42	5.57E-06	2.02E-03	1.50	7.94 14q23.1
38 202462 s_at	KIAA0801	1.51	1.95E-08	3.82E-05	1.41	7.94 5g31.1
39 233823_at	KIAA1276	2.42	4.54E-06	1.72E-03	1.48	7.87 4p16
40 241655 at		1.91	1.63E-06	8.68E-04	1.45	7.83
41 214037_s_at	JM1	1.61	1.09E-08	2.67E-05	1.38	7.81 Xp11.23
42 240354 at	MGC35033	1.70	1.72E-08	3.54E-05	1.42	7.78 12q13.11
43 207287_at	FLJ14107	1.72	1.78E-05	4.33E-03	1.48	7.72 8p21.2
44 205083_at	AOX1	1.98	3.50E-06	1.43E-03	1.44	7.71 2q33
45 229812_at	FLJ23277	1.52	1.25E-07	1.49E-04	1.38	7.69 1p36.12
46 205424_at	ProSAPiP2	-4.45	2.23E-08	4.15E-05	-1.38	-7.64 17q21.32
47 236240_at	FLJ21106	1.74	1.14E-07	1.44E-04	1.36	7.60 4q28.1
48 211747_s_at	LSM5	1.67	1.01E-03	5.57E-02	1.67	7.58 7p14.3
49 234682_at	 	1.63	3.04E-04	2.64E-02	1.57	7.57
50 218315_s_at	CDK5RAP1	1.33	6.27E-08	9.10E-05	1.34	7.53 20pter-
	· · · · ·					q11.23

2.11 Double versus Status 4

# affy id	HUGO name	fc	ţ) (9	stn	t	Map Location
1 215225_s_at	GPR17		5.75	4.09E-06	7.90E-02	6.35	17.64	— -
2 207201_s_at	SLC22A1		3.51	2.62E-06	7.90E-02	6.07	17.13	•
3 222583_s_at	NUP50		3.87	3.77E-05	2.64E-01	5.93		22q13.31
4 218728_s_at	HSPC163		2.30	4.99E-05	2.64E-01	5.55		1q42.12
5 237092_at			2.61	8.21E-06	1.06E-01	4.99	14.11	•
6 236737_at	FLJ31528		3.89	1.60E-04	3.86E-01	5.72	13.53	17q25.3
7 207114_at	LY6G6C		1.63	1.09E-04	3.79E-01	4.50	11.90	6p21.31
8 206245_s_at	NS1-BP		3.04	2.55E-05	2.46E-01	4.16		1q25.1- q31.1
9 218538_s_at	MRS2L		1.85	4.16E-05	2.64E-01	3.78	10.70	6p22.3- p22.1
10 202648_at	RPS19		-7.11	2.64E-04	4.52E-01	-4.11		19q13.2
11 206244_at	CR1		9.50	6.73E-03	6.74E-01	4.79	10.36	1q32
12 205237_at	FCN1		5.69	5.48E-05	2.64E-01	3.64	10.25	9q34
13 239246_at			2.75	1.28E-04	3.79E-01	3.63	10.15	
14 224839_s_at	GPT2		1.77	8.08E-03	6.77E-01	4.80	10.01	16q12.1
15 218778_x_at	EPS8R1		-5.46	8.36E-05	3.59E-01	-3.48	-9.82	19q13.42
16 218479_s_at	XPO4		1.32	1.25E-04	3.79E-01	3.25	9.17	13q11
17 213851_at			2.70	5.48E-04	4.67E-01	3.34	9.13	
18 214380_at	PRPF31		2.29	5.11E-04	4.67E-01	3.56	9.12	19q13.42
19 223672_at	DKFZp761D221		4.26	2.25E-03	5.63E-01	3.50	9.03	1p31.2
20 223756_at	FLJ10081		5.32	1.21E-03	4.85E-01	3.34	8.92	2p12-p11.2
21 203983_at	TSNAX		2.11	1.58E-04	3.86E-01	3.17	8.84	1q42.1
22 212490_at	DNAJC8		1.35	7.92E-04	4.85E-01	3.59	8.78	1p35.2
23 209515_s_at	RAB27A		3.68	1.25E-04	3.79E-01	3.11		15q15- q21.1
24 241493_at			4.43	2.16E-04	4.39E-01	3.17	8.74	
25 211747_s_at	LSM5		1.97	4.33E-04	4.67E-01	3.16	8.74	7p14.3
26 211742_s_at	EVI2B		2.09	1.45E-04	3.86E-01	3.01	8.50	17q11.2
27 241394_at			8.61	1.03E-02	6.88E-01	3.89	8.44	
28 223393_s_at	KIAA1474		3.40	3.13E-04	4.52E-01	3.02	8.30	19q12
29 244675_at	RGS8		3.39	5.91E-04	4.67E-01	3.14	8.27	1q25
30 230260_s_at	KIAA0084		3.65	1.29E-03	4.85E-01	3.02	8.17	3p24.3
31 222974_at	IL22		7.62	8.59E-03	6.77E-01	3.54	8.17	12q15
32 217239_x_at			8.65	1.44E-02	6.99E-01	4.36	8.14	
33 210152_at	LILRB4		4.14	2.12E-04	4.39E-01	2.89	8.12	19q13.4
34 205036_at	LSM6		2.27	1.97E-04	4.39E-01	2.88	8.10	4q31.21
35 231216_at			2.54	9.91E-03	6.85E-01	3.47	7.91	
36 232908_at			2.12	3.98E-04	4.67E-01	2.80	7.87	
37 202247_s_at	MTA1		-1.89	2.30E-04	4.44E-01	-2.78	-7.85	14q32.3
38 201540_at	FHL1		-5.17	4.48E-04	4.67E-01	-2.86	-7.83	Xq26
39 200795_at	SPARCL1		2.57	2.92E-03	5.87E-01	2.97	7.78	4q22.1
40 220461_at	FLJ11383		2.14	3.55E-04	4.67E-01	2.79	7.74	1q42.2
41 236239_at			1.37	2.22E-03	5.62E-01	2.89	7.70	
42 207509_s_at	LAIR2		2.16	2.02E-03	5.34E-01	2.87	7.68	19q13.4

43 219251_s_at	FLJ10300	-3.21	3.35E-03	6.17E-01	-2.91	-7.58 7q36.3
44 216406_at		5.56	9.93E-03	6.85E-01	3.26	7.57
45 234902_s_at	FLJ20557	-5.67	2.88E-04	4.52E-01	-2.68	-7.55 19q13.4
46 237563_s_at		2.09	2.97E-04	4.52E-01	2.67	7.55
47 234938_at	BACH1	2.31	4.73E-04	4.67E-01	2.68	7.53 21q22.11
48 243317_at		2.49	3.16E-04	4.52E-01	2.68	7.51
49 240609_at		1.96	3.03E-04	4.52E-01	2.65	7.50
50 204083_s_at	TPM2	-13.16	1.35E-03	4.85E-01	-2.99	-7.47 9p13.2- p13.1

2.12 Double versus Status 5

#	affy id	HUGO name	fc	ŗ		q	stn	t	i	Мар
				4.07	0.445.00	4.405.04		00		Location
	1 239567_at			4.97	6.11E-06			20 	14.90	45.00
	2 202228_s_at	SDFR1		2.28	2.46E-06			77	14.20	-
	3 220623_s_at	TSGA10		4.10	1.17E-05			03		2q11.2
	4 238481_at	MGP		4.47	1.88E-04	4.53E-0 ²		74		12p13.1- p12.3
	5 91816_f_at			1.67	1.17E-04	4.53E-0°	1 4.	30	12.37	
	6 230420_at			3.86	8.90E-06	1.13E-0 ²	1 4.	.05	12.13	
	7 232738_at	KIAA1680		6.89	2.01E-03	6.31E-0	1 3.	71	9.84	4q22
	8 209981_at	PIPPIN		3.09	5.27E-04	5.17E-0	1 3.	19		22q13.2- q13.31
	9 226035_at	KIAA1203		2.11	4.11E-05	3.17E-0	1 3.	.03	9.09	16p12.3
4	l0 207016_s_at	ALDH1A2		3.91	6.96E-05	3.83E-0°	1 3.	.06	8.98	15q21.2
1	11 205237_at	FCN1		3.75	5.34E-05	3.43E-0	1 2.	.92	8.73	9q34
•	12 230264_s_at	AP1S2		2.24	9.93E-04	5.73E-0	1 3.	.02	8.52	Xp22.31
•	13 211284_s_at	GRN		2.79	7.13E-03	7.66E-0	1 3.	.53	8.51	17q21.32
	14 229320_at			1.78	2.41E-03	6.69E-0	1 2.	.98	8.12	
•	15 229812_at	FLJ23277		1.55	9.56E-05	4.53E-0	1 2.	.71	8.06	1p36.12
•	16 235881_at	FHOD2		6.06	7.99E-04	5.25E-0	1 2.	.80	8.03	2q23.3
	17 229986_at			1.63	1.59E-04	4.53E-0	1 2.	.71	7.92	
•	18 209230_s_at	P8		3.00	1.78E-04	4.53E-0	1 2	.72	7.91	16p11.2
•	19 206244_at	CR1		4.14	3.10E-03	6.85E-0	1 2	.92	7.87	1q32
	20 204493_at	BID		1.87	1.68E-04	4.53E-0	1 2	.63	7.85	22q11.1
2	21 202462_s_at	KIAA0801		1.56	1.76E-04	4.53E-0	1 2	.68	7.82	5q31.1
4	22 212412_at			2.23	1.20E-04	4.53E-0	1 2	.59	7.76	
2	23 222569_at	UGCGL1		1.82	2.23E-04	4.53E-0	1 2	.60	7.72	2q14.3
4	24 218109_s_at	FLJ14153		1.47	1.98E-04	4.53E-0	1 2	.63	7.67	3q25.32
	25 240609_at			1.68	6.21E-04	5.17E-0	1 2	.60	7.58	
	26 221156_x_at	CPR8		2.15	1.69E-03	6.13E-0	1 2	.69	7.56	15q21.1
4	27 243114_at			2.82	1.21E-03	3 5.97E-0	1 2	.60	7.44	
	28 236001_at			1.70	2.21E-04	4.53E-0	1 2	.52	7.39	
	29 237714_at			2.31	1.08E-03	3 5.87E-0	1 2	.54	7.31	
;	30 212873_at	HA-1		1.69	2.08E-04	4.53E-0	1 2	.46	7.28	19p13.3
	31 236898_at			5.08	1.02E-03	5.73E-0	1 2	.50	7.22	
	32 237221_at			5.55	4.04E-03	6.93E-0	1 2	.68	7.22	
	33 232075_at	REC14		2.01	2.38E-04	4.59E-0		.45	7.20	15q24.1

34 222779_s_at	HSA277841	1.85	3.46E-04	5.17E-01	2.43	7.06 17p13.3
35 208700_s_at	TKT	1.74	5.35E-04	5.17E-01	2.49	7.01 3p14.3
36 214092 x_at	SFRS14	1.41	6.86E-04	5.17E-01	2.56	7.00 19p12
37 239939_at		1.94	3.86E-03	6.85E-01	2.56	6.99
38 206841_at	PDE6H	5.06	9.61E-03	7.91E-01	2.77	6.91 12p13
39 237563_s_at		1.89	3.01E-04	5.17E-01	2.31	6.90
40 238473_at		2.57	5.74E-04	5.17E-01	2.33	6.89
41 202400_s_at	SRF	-1.58	1.51E-03	5.97E-01	-2.40	-6.89 6p21.1
42 222974_at	IL22	4.65	5.64E-03	7.43E-01	2.58	6.85 12q15
43 231591_at	BHMT	-4.81	8.17E-04	5.25E-01	-2.53	-6.84 5q13.1-q15
44 243189_at		-3.91	5.48E-04	5.17E-01	-2.37	-6.77
45 228176_at	EDG3	5.71	1.31E-03	5.97E-01	2.34	6.76 9q22.1- q22.2
46 202440_s_at	ST5	4.10	1.17E-03	5.97E-01	2.31	6.72 11p15
47 241655_at		3.41	4.99E-04	5.17E-01	2.33	6.72
48 205962_at	PAK2	6.24	1.44E-02	8.00E-01	2.84	6.65 3q29
49 234809 at	HCA127	5.26	1.56E-02	8.00E-01	2.89	6.64 Xq11.1
50 228421_s_at	EFEMP1	5.75	3.34E-03	6.85E-01	2.37	6.59 2p16

2.13 Double versus normal

#	affy id	HUGO name	fc	р	q	[stn t	Map
••					4 005 45	0.045.40	0.00	Location
	1 205282_at	LRP8		1.97	1.96E-15	9.31E-12	2.08	15.95 1p34
	2 200595_s_at	EIF3S10		1.55	6.14E-14	1.46E-10	1.97	15.01 10q26
	3 209206_at	SEC22L1		1.66	1.93E-20	7.33E-16	1.77	14.11 1q21.2- q21.3
	4 220623_s_at	TSGA10		2.23	1.62E-18	2.05E-14	1.75	13.84 2q11.2
	5 202462_s_at	KIAA0801		1.70	1.95E-10	1.72E-07	1.84	13.61 5q31.1
	6 209476_at	TXNDC		1.87	8.96E-17	6.79E-13	1.70	13.37 14q21.3
	7 214037_s_at	JM1		1.82	2.53E-15	1.07E-11	1.66	13.00 Xp11.23
	8 232075_at	REC14		2.16	7.19E-07	1.01E-04	1.87	12.82 15q24.1
	9 213053_at	KIAA0841		1.70	4.83E-17	4.58E-13	1.60	12.68 19q13.11
	10 219938_s_at	PSTPIP2		1.81	1.50E-18	2.05E-14	1.56	12.49 18q12
	11 224587_at	PC4		1.87	1.79E-05	1.16E-03	1.90	12.18 5p13.3
	12 202306_at	POLR2G		1.65	7.03E-08	1.94E-05	1.64	11.72 11q13.1
	13 229812_at	FLJ23277		1.81	3.27E-10	2.64E-07	1.54	11.56 1p36.12
	14 227442 at	FLJ38991		1.62	6.57E-16	3.76E-12	1.44	11.44 4q13.3
	15 218538_s_at	MRS2L		1.98	1.95E-08	6.61E-06	1.54	11.25 6p22.3- p22.1
	16 222779 s_at	HSA277841		1.63	4.13E-07	7.00E-05	1.55	10.96 17p13.3
	17 219600 s_at	C21orf4		1.81	6.17E-07	9.07E-05	1.56	10.94 21q22.11
	18 213737 x at			1.74	1.69E-09	1.05E-06	1.46	10.89
	19 221471_at	,TDE1		1.82	3.30E-13	6.31E-10	1.39	10.86 20q13.1- 13.3
	20 201382_at	SIP		1.82	2.06E-09	1.24E-06	1.45	10.86 1q24-q25
	21 221513_s_at	SDCCAG16		1.55	6.95E-16	3.76E-12	1.36	10.86 Xq26.1
	22 205260 s_at	ACYP1		2.31	2.49E-06	2.68E-04	1.53	10.53 14q24.3
	23 213312_at	DKFZP586E192	3	1.73	4.18E-15	1.59E-11	1.31	10.49 6q15-q16.1

39											
24 201784_s_at	SMAP	1.49	3.82E-14	1.12E-10	1.32	10.45 11p15.1					
25 219007_at	Nup43	2.32	1.02E-04	4.10E-03	1.62	10.15 6q24.3					
26 203327_at	IDE	1.86	2.09E-06	2.34E-04	1.44	10.02 10q23-q25					
27 217746_s_at .	PDCD6IP	1.46	4.18E-14	1.13E-10	1.26	10.01 3p22.1					
28 238099_at	HSPA4	2.78	1.38E-03	2.88E-02	1.90	9.93 5q31.1- q31.2					
29 205446_s_at	ATF2	1.72	8.26E-06	6.67E-04	1.45	9.89 2q32					
30·203465_at	MRPL19	1.84	3.73E-14	1.12E-10	1.24	9.89 2q11.1- q11.2					
31 200809_x_at	RPL12	-1.18	3.01E-14	1.04E-10	-1.23	-9.87 9q34					
32 218109_s_at	FLJ14153	1.67	1.11E-12	1.84E-09	1.25	9.84 3q25.32					
33 205588_s_at	FOP	1.66	2.93E-09	1.63E-06	1.29	9.74 6q27					
34 221481_x_at	HNRPD	1.41	5.53E-04	1.45E-02	1.69	9.73 4q21.1- q21.2					
35 204120_s_at	ADK	2.04	1.10E-03	2.45E-02	1.80	9.73 10cen-q24					
36 205424_at	ProSAPiP2	-2.98	4.82E-14	1.22E-10	-1.21	-9.72 17q21.32					
37 208374_s_at	CAPZA1	1.49	1.36E-08	5.14E-06	1.28	9.57 1p13.1					
38 202228_s_at	SDFR1	1.70	2.36E-11	2.99E-08	1.21	9.47 15q22					
39 224444_s_at	MGC14801	2.74	1.11E-03	2.46E-02	1.72	9.42 1q32.2					
40 218243_at	RUFY1	1.43	1.83E-10	1.65E-07	1.22	9.39 5q35.3					
41 228420_at	PDCD2	1.49	1.84E-08	6.40E-06	1.24	9.31 6q27					
42 228322_at	C14orf35	1.97	5.65E-12	7.66E-09	1.18	9.30 14q22.2					
43 214092_x_at	SFRS14	1.48	2.61E-13	5.81E-10	1.16	9.29 19p12					
44 218870_at	ARHGAP15	1.91	1.03E-05	7.73E-04	1.36	9.28 2q22.2					
45 228904_at		1.96	3.33E-13	6.31E-10	1.15	9.23					
46 241330_x_at		-8.85	3.30E-13	6.31E-10	-1.15	-9.21					
47 204798_at	MYB	1.78	1.21E-09	7.90E-07	1.20	9.20 6q22-q23					
48 202854_at	HPRT1	1.64	1.76E-04	6.09E-03	1.46	9.14 Xq26.1					
49 241086_at		-4.28	5.33E-13	9.62E-10	-1.15	-9.13					
50 201464_x_at	JUN	1.98	1.10E-09	7.29E-07	1.18	9.08 1p32-p31					

2.14 Status 1 versus Status 2

# affy id	HUGO name	fc p		7	stn t	Map
1 204383_at	DGCR14	-1.74	1.62E-05	4.70E-01	-0.94	Location -5.20 22q11.21
2 228495_at		-1.76	6.39E-05	4.70E-01	-0.88	-4.80
3 214789_x_at	SRP46	1.75	1.36E-04	4.70E-01	0.82	4.48 11q22
4 226321_at	LOC116068	-1.77	1.33E-04	4.70E-01	-0.81	-4.45 5q14.3
5 240153_at		-1.97	1.25E-04	4.70E-01	-0.80	-4.45
6 235907_at		-1.69	1.33E-04	4.70E-01	-0.80	4.42
7 235022_at	MGC24180	-1.62	1.64E-04	4.70E-01	-0.81	-4.40 18p11.1
8 211523_at	GNRHR	-3.31	1.63E-04	4.70E-01	-0.79	-4.37 4q21.2
9 230387_at		-1.83	1.73E-04	4.70E-01	-0.79	-4.34
10 227045_at		-1.84	3.05E-04	4.70E-01	-0.84	-4.33
11 241815_at		-1.86	1.68E-04	4.70E-01	-0.78	-4.33
12 228595_at	HSD17B1	-2.35	1.78E-04	4.70E-01	-0.78	-4.31 17q11-q21
13 217246_s_at	EPAG	-3.33	2.47E-04	4.70E-01	-0.79	-4.27 X
14 234952_s_at	KIAA1542	-2.48	2.66E-04	4.70E-01	-0.79	-4.27 11p15.5

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15 228363_at		-1.70	1.95E-04	4.70E-01	-0.77	-4.27
16 222656_at		-2.15	2.77E-04	4.70E-01	-0.79	-4.25
17 201367_s_at	ZFP36L2	-2.30	2.54E-04	4.70E-01	-0.78	-4.24 2p22.3-p21
18 218522_s_at	VCY2IP1	-1.76	2.31E-04	4.70E-01	-0.76	-4.23 19p13.11
19 201296_s_at	WSB1	-1.63	2.45E-04	4.70E-01	-0.75	-4.19 17q11.1
20 229262_at		-3.55	5.36E-04	5.01E-01	-0.86	-4.16
21 223263_s_at	DKFZP564O1863	-1.91	3.57E-04	4.70E-01	-0.76	-4.14 12p11.23
22 201354_s_at	BAZ2A	-2.05	4.04E-04	4.81E-01	-0.76	-4.13 12q24.3- qter
23 222602_at	FLJ10808	-1.62	3.04E-04	4.70E-01	-0.75	-4.13 4q13.2
24 206796_at	WISP1	-2.46	3.37E-04	4.70E-01	-0.74	-4.08 8q24.1- q24.3
25	ATF2	-1.89	3.43E-04	4.70E-01	-0.73	-4.07 2q32
26 201164_s_at	PUM1	-1.33	3.44E-04	4.70E-01	-0.73	-4.06 1p35.2
27 221813_at	KIAA1332	-1.93	4.52E-04	5.01E-01	-0.75	-4.05 1p36.23- p36.11
28 226277_at	COL4A3BP	-1.58	3.58E-04	4.70E-01	-0.73	-4.05 5q13.2
29 225753_at	SNX17	-2.16	3.61E-04	4.70E-01	-0.73	-4.04 2p23-p22
30 211048_s_at	ERP70	-1.78	3.67E-04	4.70E-01	-0.73	-4.04 7q35
31 227249_at	NUDE1	-1.61	3.85E-04	4.75E-01	-0.72	-4.02 16p13.11
32 226588_at	KIAA1604	-1.91	5.95E-04	5.05E-01	-0.75	-3.99 2q31.3
33 201389_at	ITGA5	-1.75	4.42E-04	5.01E-01	-0.71	-3.97 12q11-q13
34 238496_at	WHSC1L1	-1.74	5.06E-04	5.01E-01	-0.71	-3.93 8p11.2
35 205574_x_at	BMP1	-1.71	4.97E-04	5.01E-01	-0.70	-3.92 8p21
36 228583_at		-1.70	5.62E-04	5.05E-01	-0.71	-3.91
37 222505_at	C7orf2	-2.22	5.17E-04	5.01E-01	-0.70	-3.91 7q36
38 225858_s_at		-1.60	5.26E-04	5.01E-01	-0.70	-3.91
39 226752_at		-1.64	5.99E-04	5.05E-01	-0.71	-3.91
40 201369_s_at	ZFP36L2	-2.47	7.00E-04	5.12E-01	-0.73	-3.90 2p22.3-p21
41 222414_at	MLL3	-1.41	5.36E-04	5.01E-01	-0.70	-3.90 7q34-q36
42 212748_at	MKL1	-1.60	5.95E-04	5.05E-01	-0.70	-3.87 22q13
43 213244_at	SCAMP-4	-1.92	7.41E-04	5.12E-01	-0.72	-3.86 19p13.3
44 225821_s_at	KIAA1327	-1.63	6.25E-04	5.12E-01	-0.69	-3.84 4p15.33
45 225002_s_at	DKFZP566I1024	-1.59	7.08E-04	5.12E-01	-0.70	-3.84 7q11.1
46 222399_s_at	SMBP	-1.54	6.45E-04	5.12E-01	-0.69	-3.84 10q23.33
47 200014_s_at - HG-U133B	HNRPC	-1.29	7.11E-04	5.12E-01	-0.70	-3.84 14q11.1
48 213066_at	KIAA0375	-2.40	6.67E-04	5.12E-01	-0.70	-3.84 9p13.1
49 243470_at		-2.15	6.58E-04	5.12E-01	-0.69	-3.82
50 234942_s_at		-1.96	8.35E-04	5.42E-01	-0.70	-3.79

2.15 Status 1 versus Status 3

#	affy id	HUGO name	fc	p	q	stn	t Map Location
	1 209235_at	CLCN7	-3.24	3.11E-06	6.29E-02	-0.87	-5.53 16p13
	2 213244_at	SCAMP-4	-2.06	5.21E-06	6.29E-02	-0.83	-5.29 19p13.3
	3 217246_s_at	EPAG	-3.22	5.08E-06	6.29E-02	-0.83	-5.29 X
	4 242713 at		-2.41	1.67E-05	1.38E-01	-0.78	-4.96

5 204383_at	DGCR14	-1.58	1.90E-05	1.38E-01	-0.77	-4.92 22q11.21
6 205574_x_at	BMP1	-1.97	2.73E-05	1.41E-01	-0.74	-4.75 8p21
7 213066_at	KIAA0375	-2.72	2.81E-05	1.41E-01	-0.74	-4.74 9p13.1
8 204494_s_at	DKFZP434H132	-2.14	3.10E-05	1.41E-01	-0.74	-4.71 15q22.33
9 219491_at	MGC3103	-2.76	4.07E-05	1.59E-01	-0.72	-4.63 11q13.1
10 201079_at	SYNGR2	-1.82	4.38E-05	1.59E-01	-0.72	-4.60 17q25.3
11 220748_s_at	LOC51157	-1.82	7.28E-05	1.72E-01	-0.73	-4.58 19q13.42
12 205631_at	KIAA0586	1.37	1.80E-04	1.76E-01	0.79	4.56 14q22.3
13 201552_at	LAMP1	-1.56	9.55E-05	1.72E-01	-0.73	-4.53 13q34
14 218438_s_at	EG1	-1.46	5.59E-05	1.72E-01	-0.71	-4.53 4p16
15 219457_s_at	RIN3	-1.70	8.89E-05	1.72E-01	-0.73	-4.52 14q32.13
16 236269_at	LOC89887	-1.60	6.00E-05	1.72E-01	-0.70	-4.50 19
17 214394_x_at	EEF1D	-1.31	1.51E-04	1.72E-01	-0.75	-4.50 8q24.3
18 203891_s_at	DAPK3	-2.13	2.31E-04	1.76E-01	-0.78	-4.50 19p13.3
19 201329_s_at	ETS2	-2.26	6.43E-05	1.72E-01	-0.70	-4.48 21q22.2
20 204341_at	TRIM16	-2.07	8.55E-05	1.72E-01	-0.72	-4.48 17p11.2
21 201487_at	CTSC	-2.05	7.89E-05	1.72E-01	-0.71	-4.48 11q14.1- q14.3
22 214698_at	ROD1	-1.75	1.57E-04	1.72E-01	-0.73	-4.42 9q32
23 212300_at	DKFZp451J0118	-1.71	8.63E-05	1.72E-01	-0.69	-4.41 1p34.3
24 216180_s_at		-7.20	1.32E-04	1.72E-01	-0.76	-4.40
25 234408_at	IL17F	-2.31	1.02E-04	1.72E-01	-0.70	-4.40 6p12
26 238203_at		-2.81	9.13E-05	1.72E-01	-0.68	-4.36
27 227355_at		1.76	2.84E-04	1.76E-01	0.73	4.32
28 225753_at	SNX17	-2.08	1.66E-04	1.72E-01	-0.70	-4.32 2p23-p22
29 227469_at	PTEN	1.25	1.26E-04	1.72E-01	0.68	4.31 10q23.3
30 209308_s_at	BNIP2	-1.57	1.92E-04	1.76E-01	-0.70	-4.30 15q21.3
31 205774_at	F12	-1.78	1.56E-04	1.72E-01	-0.68	-4.28 5q33-qter
32 201551_s_at	LAMP1	-1.65	1.22E-04	1.72E-01	-0.67	-4.27 13q34
33 234952_s_at	KIAA1542	-2.06	1.25E-04	1.72E-01	-0.67	-4.26 11p15.5
34 224453_s_at	EKI1	-1.80	1.26E-04	1.72E-01	-0.67	-4.26 12p12.1
35 225254_at	MGC20255	-1.97	1.76E-04	1.76E-01	-0.68	-4.25 19q13.13
36 219681_s_at	RCP	-1.95	1.31E-04	1.72E-01	-0.66	-4.25 8p11.22
37 202682_s_at	USP4	-1.38	1.34E-04	1.72E-01	-0.66	-4.24 3p21.3
38 220516_at	ZFP29	-2.53	1.51E-04	1.72E-01	-0.67	-4.24 15q25.1
39 212005_at	DKFZP566C0424	-2.96	1.59E-04	1.72E-01	-0.65	-4.18 1p36.13
40 224669_at	C20orf169	-1.37	1.65E-04	1.72E-01	-0.65	-4.17 20q13.11
41 221754_s_at	CORO1B	-2.89	3.36E-04	1.76E-01	-0.68	-4.14 11q13.1
42 205281_s_at	PIGA	-1.79	2.20E-04	1.76E-01	-0.65	-4.11 Xp22.1
43 204090_at	STK19	-1.42	3.99E-04	1.84E-01	-0.68	-4.11 6p21.3
44 217411_s_at	RREB1	-3.16	2.10E-04	1.76E-01	-0.65	-4.11 6p25
45 224439_x_at	RNF7	-1.51	2.20E-04	1.76E-01	-0.64	-4.09 3q22-q24
46 218964_at	DRIL2	-2.57	2.14E-04	1.76E-01	-0.64	-4.09 15q24
47 222488_s_at	DCTN4	-1.56	2.48E-04	1.76E-01	-0.64	-4.08 5q31-q32
48 207118_s_at	MMP23A	-2.34	2.51E-04	1.76E-01	-0.65	-4.08 1p36.3
49 205227_at	IL1RAP	-2.58	2.82E-04	1.76E-01	-0.65	-4.08 3q28
50 201585_s_at	SFPQ	-1.55	2.23E-04	1.76E-01	-0.64	-4.07 1p34.3

2.16 Status 1 versus Status 4

# affy id	HUGO name	fc	p	q	stn t	Map
1 219964_at	ST7L	-2.73	9.88E-07	2.65E-02	-2.06	Location -8.42 1p13.1
2 36545_s_at	KIAA0542	-1.66	1.65E-06	2.65E-02	-1.93	-7.90 22q12.2
3 240943 at		-3.91	3.82E-04	1.37E-01	-2.31	-7.81
4 201551_s_at	LAMP1	-1.90	3.05E-05	9.31E-02	-1.91	-7.48 13q34
5 242313_at		-2.52	2.64E-04	1.16E-01	<i>-</i> 2.08	-7.42
6 202648_at	RPS19	-4.11	2.87E-05	9.31E-02	-1.87	-7.36 19q13.2
7 201005_at	CD9	-5.45	1.72E-04	1.16E-01	-1.98	-7.29 12p13.3
8 206799_at	SCGB1D2	2.06	2.88E-06	3.08E-02	1.77	7.26 11q13
9 218983_at	LOC51279	-2.86	3.52E-05	9.31E-02	-1.85	-7.24 12p13.31
10 221942_s_at	GUCY1A3	-3.18	6.47E-05	9.44E-02	-1.86	-7.19 4q31.1- q31.2
11 210425_x_at	GOLGIN-67	-2.52	1.22E-04	1.16E-01	-1.84	-6.98 15q11.2
12 204341_at	TRIM16	-2.48	9.36E-04	1.71E-01	-2.12	-6.91 17p11.2
13 201862_s_at	LRRFIP1	-1.88	5.60E-05	9.31E-02	-1.73	-6.81 2q37.3
14 220974_x_at	BA108L7.2	-3.88	5.88E-05	9.31E-02	-1.70	-6.69 10q24.31
15 45297_at	MGC45806	-4.32	1.15E-03	1.87E-01	-2.06	-6.67 1p35.2
16 204073_s_at	C11orf9	-3.14	2.23E-04	1.16E-01	-1.72	-6.49 11q12- q13.1
17 205774_at	F12	-2.71	4.49E-04	1.39E-01	-1.79	-6.48 5q33-qter
18 200768_s_at	MAT2A	-1.85	1.67E-05	9.31E-02	-1.57	-6.44 2p11.2
19 206574_s_at	PTP4A3	-7.94	1.51E-03	1.95E-01	-2.00	-6.40
20 201613_s_at	RUVBL1	-2.69	2.15E-04	1.16E-01	-1.68	-6.39 3q21
21 227227_at		-2.04	1.96E-05	9.31E-02	-1.56	-6.38
22 217226_s_at	BA108L7.2	-3.12	5.75E-04	1.47E-01	-1.77	-6.34 10q24.31
23 201552_at	LAMP1	-1.82	4.50E-05	9.31E-02	2 -1.57	-6.31 13q34
24 202111_at	SLC4A2	-7.13	1.41E-03	1.94E-01	-1.89	-6.24 7q35-q36
25 221005_s_at	PTDSS2	-1.94	2.01E-05	9.31E-02	2 -1.48	-6.12 11p15
26 225180_at	FLJ00166	-2.24	6.09E-05	9.31E-02	-1.51	-6.09 3q27.2
27 212608_s_at		-1.85	2.23E-05	9.31E-02	-1.48	-6.08
28 223716_s_at	ZNF265	-1.90	1.50E-04	1.16E-01	-1.53	-6.00 1p31
29 218518_at	C5orf5	-1.80	5.80E-05	9.31E-02	-1.48	-5.99 5q31
30 226959_at		-3.41	6.44E-04	1.49E-01	-1.64	-5.98
31 202344_at	HSF1	-1.65	2.65E-05	9.31E-02	-1.45	-5.96 8q24.3
32 222138_s_at	WDR13	-1.97	1.05E-03	1.82E-01	-1.69	-5.94 Xp11.23
33 230589_at		-2.50	4.72E-05	9.31E-02	2 -1.44	-5.90
34 237243_at		-3.09	4.37E-04	1.37E-01	-1.55	-5.86
35 202247_s_at	MTA1	-1.58	2.46E-04	1.16E-01	-1.50	-5.84 14q32.3
36 229700_at		-2.37	1.13E-03	1.87E-01	- 1.65	-5.81
37 209695_at	PTP4A3	-2.46	1.75E-03	1.98E-01	-1.73	-5.81
38 208728_s_at	CDC42	-1.78	5.77E-05	9.31E-02	2 -1.41	-5.77 1p36.1
39 206148_at	IL3RA	-6.45	3.21E-03	2.28E-01	-1.93	-5.75 Xp22.3 or Yp11.3
40 231896_s_at	DENR	-1.64	5.90E-05	9.31E-02	2 -1.40	-5.72 12q24.31
41 230434_at	MGC22679	-2.10	1.77E-04	1.16E-01	-1.44	-5.72 2q31.1
42 212176_at	DKFZp564B0769	-1.85	1.19E-04	1.16E-01	<i>-</i> 1.42	-5.71 6q16.3

<u> </u>						
43 203085_s_at	TGFB1	-2.52	2.37E-04	1.16E-01	-1.45	-5.70 19q13.2
44 209742_s_at	MYL2	3.30	5.30E-05	9.31E-02	1.39	5.67 12q23- q24.3
45 204160_s_at	ENPP4	-2.45	3.00E-04	1.24E-01	-1.45	-5.65 6p12.3
46 219595_at	ZNF26	-1.46	1.16E-04	1.16E-01	-1.46	-5.63 12q24.33
47 242832_at	PER1	-2.70	7.16E-05	9.58E-02	-1.37	-5.59 17p13.1- 17p12
48 235780_at	PRKACB	-2.03	5.54E-05	9.31E-02	-1.36	-5.59 1p36.1
49 201260_s_at	SYPL	-1.57	1.54E-04	1.16E-01	-1.39	-5.56 7q22.1
50 213851_at		2.56	6.78E-05	9.46E-02	1.36	5.55

2.17 Status 1 versus Status 5

#	affy id	HUGO name	fc	р	q	stn t	Map
	1 213244_at	SCAMP-4	-2.80	1.26E-03	8.94E-01	-1.69	Location -5.69 19p13.3
	2 203453 at	SCNN1A	4.02	1.28E-04		1.45	5.59 12p13
	3 201329_s_at	ETS2	-2.27	8.14E-05			-5.52 21q22.2
	4 209742_s_at	MYL2	2.53	1.87E-04		1.32	5.24 12q23- q24.3
	5 241821_at		2.20	1.40E-04	8.94E-01	1.19	5.00
	6 241909_at		11.41	3.79E-04	8.94E-01	1.35	5.00
	7 239567_at		3.46	1.72E-04	8.94E-01	1.16	4.89
	8 234234_at		2.46	2.56E-04	8.94E-01	1.16	4.81
	9 31846_at	ARHD	1.47	3.09E-04	8.94E-01	1.15	4.79 11q14.3
	10 228992_at	EG1	-1.40	2.91E-04	8.94E-01	-1.14	-4.78 4p16
•	11 217575_s_at	SOS2	3.75	4.34E-04	8.94E-01	1.21	4.77 14q21
	12 221201_s_at	ZNF155	-3.31	2.51E-03	8.94E-01	-1.29	-4.64 19q13.2- q13.32
	13 204105_s_at	NRCAM	2.40	5.34E-04	8.94E-01	1.08	4.50 7q31.1- q31.2
	14 227355_at		2.35	7.44E-04	8.94E-01	1.10	4.50
	15 208007_at		3.82	6.81E-04	8.94E-01	1.13	4.49
	16 213778_x_at	FANCA	-1.60	4.35E-04	8.94E-01	-1.06	-4.49 16q24.3
	17 210158_at	ERCC4	2.64	3.90E-04	8.94E-01	1.05	4.47 16p13.3- p13.11
	18 222734_at	WARS2	-1.78	1.73E-03	8.94E-01	-1.15	-4.46 1p13.3- p13.1
	19 231010_at	PRO0971	1.84	6.01E-04	8.94E-01	1.09	4.45 4q25
	20 226415_at	KIAA1576	3.09	4.91E-04	8.94E-01	1.06	4.44 16q23.1
	21 202646_s_at	D1S155E	-1.38	4.65E-04	8.94E-01	-1.05	-4.43 1p22
	22 226585_at	NEIL2	-2.14	8.75E-04	8.94E-01	-1.08	-4.43
	23 225389_at	BTBD6	1.55	4.98E-04	8.94E-01	1.05	4.41 14q32
	24 208519_x_at	GNRH2	2.16	5.89E-04	8.94E-01	1.05	4.41 20p13
	25 228950_s_at	FLJ23091	4.03	1.05E-03	8.94E-01	1.17	4.36 1p31.2
	26 200606_at	DSP	2.23	7.22E-04	8.94E-01	1.05	4.36 6p24
	27 219488_at	A4GALT	2.01	5.50E-04		1.02	4.31 22q11.2- q13.2
	28 238267_s_at		2.91	5.88E-04	8.94E-01		4.30
	29 206159_at	GDF10	3.13	7.86E-04	8.94E-01	1.03	4.25 10q11.21
	30 222178_s_at	CDC5L	3.40	7.79E-04	8.94E-01	1.02	4.24 6p21

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	2.37	1.20E-03	8.94E-01	1.03	4.24
	2.02	3.46E-03	8.94E-01	1.13	4.20
SS18L1	-1.52	1.11E-03	8.94E-01	-1.00	-4.17 20q13.3
	2.43	2.43E-03	8.94E-01	1.06	4.16
KIF5A	1.51	7.85E-04	8.94E-01	0.98	4.15 12q13
FLJ22347	3.04	1.06E-03	8.94E-01	1.01	4.15 11q12.2
SSB3	1.58	8.34E-04	8.94E-01	0.98	4.14 16p13.3
S100A15	2.55	8.80E-04	8.94E-01	0.99	4.13
FLJ39501	3.16	8.34E-04	8.94E-01	0.97	4.11 19p13.11
ALDOB	2.44	8.57E-04	8.94E-01	0.97	4.11 9q21.3- q22.2
PCANAP7	1.93	8.53E-04	8.94E-01	0.97	4.11 11q12.2
UBE2N	-1.29	1.88E-03	8.94E-01	-1.01	· -4.10 12q22
GTF2H1	2.80	8.46E-04	8.94E-01	0.97	4.10 11p15.1- p14
	2.97	1.30E-03	8.94E-01	1.02	4.10
	4.18	8.83E-04	8.94E-01	0.97	4.09
KIF9	-1.57	1.71E-03	8.94E-01	-1.01	-4.09 3p21.31
D-3_at - HG-	1.40	8.76E-04	8.94E-01	0.96	4.08
	2.21	8.87E-04	8.94E-01	0.96	4.07
STAM2	1.48	8.88E-04	8.94E-01	0.96	4.07 2q23.3
ZNF204	2.37	1.35E-03	8.94E-01	1.01	4.07 6p21.3
	KIF5A FLJ22347 SSB3 S100A15 FLJ39501 ALDOB PCANAP7 UBE2N GTF2H1 KIF9 D-3_at - HG-	2.02 SS18L1 -1.52 2.43 KIF5A 1.51 FLJ22347 3.04 SSB3 1.58 S100A15 2.55 FLJ39501 3.16 ALDOB 2.44 PCANAP7 1.93 UBE2N -1.29 GTF2H1 2.80 KIF9 -1.57 D-3_at - HG- 1.40 STAM2 1.48	2.02 3.46E-03 SS18L1 -1.52 1.11E-03 2.43 2.43E-03 KIF5A 1.51 7.85E-04 FLJ22347 3.04 1.06E-03 SSB3 1.58 8.34E-04 S100A15 2.55 8.80E-04 FLJ39501 3.16 8.34E-04 ALDOB 2.44 8.57E-04 PCANAP7 1.93 8.53E-04 UBE2N -1.29 1.88E-03 GTF2H1 2.80 8.46E-04 KIF9 -1.57 1.71E-03 D-3_at-HG- 1.40 8.76E-04 STAM2 1.48 8.88E-04	2.02 3.46E-03 8.94E-01 2.43 2.43E-03 8.94E-01 2.43 2.43E-03 8.94E-01 KIF5A 1.51 7.85E-04 8.94E-01 FLJ22347 3.04 1.06E-03 8.94E-01 SSB3 1.58 8.34E-04 8.94E-01 S100A15 2.55 8.80E-04 8.94E-01 FLJ39501 3.16 8.34E-04 8.94E-01 ALDOB 2.44 8.57E-04 8.94E-01 PCANAP7 1.93 8.53E-04 8.94E-01 UBE2N -1.29 1.88E-03 8.94E-01 GTF2H1 2.80 8.46E-04 8.94E-01 KIF9 -1.57 1.71E-03 8.94E-01 KIF9 -1.57 1.71E-03 8.94E-01 KIF9 -1.57 1.71E-03 8.94E-01 STAM2 1.48 8.88E-04 8.94E-01	2.02 3.46E-03 8.94E-01 1.13 SS18L1 -1.52 1.11E-03 8.94E-01 -1.00 2.43 2.43E-03 8.94E-01 1.06 KIF5A 1.51 7.85E-04 8.94E-01 0.98 FLJ22347 3.04 1.06E-03 8.94E-01 1.01 SSB3 1.58 8.34E-04 8.94E-01 0.98 S100A15 2.55 8.80E-04 8.94E-01 0.99 FLJ39501 3.16 8.34E-04 8.94E-01 0.97 ALDOB 2.44 8.57E-04 8.94E-01 0.97 PCANAP7 1.93 8.53E-04 8.94E-01 0.97 UBE2N -1.29 1.88E-03 8.94E-01 0.97 UBE2N -1.29 1.88E-03 8.94E-01 0.97 GTF2H1 2.80 8.46E-04 8.94E-01 0.97 KIF9 -1.57 1.71E-03 8.94E-01 0.97 KIF9 -1.57 1.71E-03 8.94E-01 0.96 STAM2 1.48 8.88E-04 8.94E-01 0.96

2.18 Status 1 versus normal

#	affy id	HUGO name	fc	p	q	stn t	Map Location
	1 237243_at		-3.49	2.63E-07	5.39E-03	-0.67	-5.70
	2 208145_at	FLJ20802	-3.20	3.23E-07	5.39E-03	-0.67	-5.67 20p13
	3 211523_at	GNRHR	-3.13	2.67E-06	1.27E-02	-0.68	-5.45 4q21.2
	4 223346_at	VPS18	-1.79	2.18E-06	1.21E-02	-0.66	-5.39 15q14-q15
	5 205013_s_at	ADORA2A	-2.07	1.07E-06	1.19E-02	-0.63	-5.35 22q11.23
	6 218059_at	LOC51123	-1.47	1.99E-06	1.21E-02	-0.62	-5.24 8q22.3
	7 201460_at	MAPKAPK2	-1.51	7.91E-06	2.03E-02	-0.65	-5.19 1q32
	8 223441_at	SLC17A5	-2.08	2.07E-06	1.21E-02	-0.61	-5.17 6q14-q15
	9 204383_at	DGCR14	-1.50	1.73E-05	2.50E-02	-0.68	-5.17 22q11.21
•	10 217246_s_at	EPAG	-2.88	4.89E-06	1.81E-02	-0.62	-5.14 X
•	11 228812_at		-1.96	1.11E-05	2.17E-02	-0.63	-5.06
	12 233888_s_at	SRGAP1	-2.79	3.37E-06	1.40E-02	-0.59	-5.05 12q14.1
,	13 208072_s_at	DGKD	-1.93	6.78E-06	1.88E-02	-0.60	-5.01 2q37.1
	14 213749_at	MASP1	-2.17	1.55E-05	2.40E-02	-0.62	-4.95 3q27-q28
,	15 213961_s_at	TAF6L	-1.96	6.61E-06	1.88E-02	-0.58	-4.90 11q12.2
,	16 239925_at		-2.01	6.65E-06	1.88E-02	-0.57	-4.87
	17 236683_at		-1.76	2.82E-05	2.82E-02	-0.62	-4.85
	18 206235_at	LIG4	-1.85	1.06E-05	2.17E-02	-0.58	-4.83 13q33-q34
	19 211122_s_at	CXCL11	-2.99	1.24E-05	2.21E-02	-0.58	-4.80 4q21.2
	20 216982_x_at		-3.04	9.07E-06	2.16E-02	-0.57	-4.80
	21 203761_at	SLA	-2.26	1.07E-05	2.17E-02	-0.56	-4.78 8q24

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22 204872_at	BCE-1	-1.75	1.44E-05	2.40E-02	-0.57	-4.74 9q21.31
23 213033_s_at		-1.70	1.58E-05	2.40E-02	-0.57	-4.73
24 219582_at	FLJ21079	-1.63	2.25E-05	2.75E-02	-0.58	-4.72 6q13
25 220569_at	PRO1728	-1.97	1.26E-05	2.21E-02	-0.56	-4.72 10q21.1
26 231981_at		-1.75	2.87E-05	2.82E-02	-0.58	-4.69
27 228087_at	LOC90693	-1.74	4.72E-05	3.30E-02	-0.59	-4.67 7p15.3
28 244115_at	DRCTNNB1A	-2.25	2.07E-05	2.66E-02	-0.55	-4.64 7p15.3
29 242541_at	ABCA9	-1.92	4.45E-05	3.30E-02	-0.58	-4.63 17q24.2
30 46323_at	SHAPY	-1.43	5.14E-05	3.30E-02	-0.59	-4.62 17q25.3
31 226566_at	TRIM11	-1.63	1.94E-05	2.59E-02	-0.54	-4.61 1q42.13
32 212117_at	TC10	-1.52	2.96E-05	2.82E-02	-0.56	-4.60 2p21
33 220363_s_at	ELMO2	-3.55	1.93E-05	2.59E-02	-0.54	-4.60 20q13
34 221697_at		-2.28	2.69E-05	2.80E-02	-0.55	-4.59
35 222205_x_at		-2.07	6.58E-05	3.30E-02	-0.59	-4.59
36 233000_x_at	C20orf143	-1.75	3.20E-05	2.88E-02	-0.55	-4.58 20q13.33
37 228363_at		-1.63	5.53E-05	3.30E-02	-0.58	-4.57
38 204495_s_at	DKFZP434H132	-1.82	5.21E-05	3.30E-02	-0.57	-4.57 15q22.33
39 216181_at		-1.55	6.63E-05	3.30E-02	<i>-</i> 0.58	-4.55
40 221840_at	PTPRE	-1.94	5.16E-05	3.30E-02	-0.56	-4.54 10q26
41 222415_at	MLL3	-1.61	2.43E-05	2.75E-02	-0.53	-4.53 7q34-q36
42 218284_at	DKFZP586N0721	-1.89	2.55E-05	2.75E-02	-0.53	-4.52 15q22.2
43 220900_at	FLJ12078	-3.76	2.53E-05	2.75E-02	-0.53	-4.51 5q14.3
44 244549_at		-2.05	6.82E-05	3.30E-02	-0.57	-4.51
45 214266_s_at	ENIGMA	-2.57	2.51E-05	2.75E-02	-0.53	-4.51 5q35.3
46 215575_at		-2.79	3.73E-05	3.18E-02	-0.54	-4.50
47 228234_at		-2.17	4.64E-05	3.30E-02	-0.55	-4.49
48 201110_s_at	THBS1	-6.24	3.15E-05	2.88E-02	-0.54	-4.48 15q15
49 217191_x_at		-1.62	2.11E-04	4.72E-02	-0.63	-4.48
50 218728_s_at	HSPC163	-1.80	6.29E-05	3.30E-02	-0.56	-4.47 1q42.12

2.19 Status 2 versus Status 3

·#	affy id	HUGO name	fc	p	q	stn	t Map Location
	1 213048_s_at	SET	-1.52	6.56E-05	5.93E-01	-0.65	-4.44 9q34
	2 201150_s_at	TIMP3	2.10	2.09E-04	5.93E-01	0.65	4.20 22q12.3
	3 215139_at		2.10	2.60E-04	5.93E-01	0.65	4.16
	4 212619_at	KIAA0286	1.54	2.98E-04	5.93E-01	0.63	4.09 12q13.13
	5 208958_at	TXNDC4	1.97	4.76E-04	5.93E-01	0.66	4.03 9q22.33
	6 239413_at		1.83	6.26E-04	5.93E-01	0.70	4.00
	7 204413_at	TRAF2	2.25	4.83E-04	5.93E-01	0.64	3.99 9q34
	8 215170_s_at	KIAA0912	2.20	6.46E-04	5.93E-01	0.66	3.94 15q15.2
	9 228583_at		1.63	6.77E-04	5.93E-01	0.66	3.93
	10 222702_x_at	CRIPT	1.51	6.66E-04	5.93E-01	0.63	3.88 2p21
	11 213736_at	COX5B	-2.86	5.52E-04	5.93E-01	-0.57	-3.79 2cen-q13
	12 226601_at		1.52	7.93E-04	5.93E-01	0.60	3.79
	13 227942 s at	CRIPT	1.45	1.25E-03	5.93E-01	0.61	3.66 2p21

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14 235719_at		-1.88	6.61E-04	5.93E-01	-0.53	-3.66
15 215487_x_at		-2.08	7.76E-04	5.93E-01	-0.52	-3.60
16 219920_s_at	GMPPB	1.49	1.07E-03	5.93E-01	0.54	3.57 3p21.31
17 207688_s_at	INHBC	-1.65	8.81E-04	5.93E-01	-0.52	-3.56 12q13.1
18 215106_at	FLJ20619	2.03	1.22E-03	5.93E-01	0.53	3.53 1p32.2
19 202028_s_at	RPL38	-1.72	1.20E-03	5.93E-01	-0.51	-3.48 17q23-q25
20 216450_x_at	TRA1	-1.47	1.26E-03	5.93E-01	-0.50	-3.46 12q24.2- q24.3
21 244324_at		2.32	2.41E-03	5.93E-01	0.60	3.44
22 219758_at	FLJ12571	1.74	1.56E-03	5.93E-01	0.51	3.43 7q34
23 232065_x_at	dJ383J4.3	1.80	2.71E-03	5.93E-01	0.62	3.42 1q23.3
24 235952_at		2.45	1.80E-03	5.93E-01	0.52	3.42
25 216180_s_at		-3.55	1.57E-03	5.93E-01	-0.51	-3.41
26 226089_at	MGC23920	1.48	2.29E-03	5.93E-01	0.56	3.41 3q13.33
27 235089_at	MGC15482	1.61	2.75E-03	5.93E-01	0.61	3.40 17q21.1
28 241522_at		1.65	1.52E-03	5.93E-01	0.49	3.38
29 235549_at	LOC255488	2.59	2.42E-03	5.93E-01	0.55	3.37 6p22.3
30 215450_at	SNRPE	-1.53	1.83E-03	5.93E-01	-0.49	-3.33 1q32
31 204329_s_at	ZNF202	2.10	2.74E-03	5.93E-01	0.54	3.33 11q23.3
32 234216_at		-1.44	1.75E-03	5.93E-01	-0.48	-3.32
33 244193_at	FLJ13236	1.43	2.58E-03	5.93E-01	0.52	3.31 12q13.12
34 237293_at		2.05	2.73E-03	5.93E-01	0.53	3.31
35 218009_s_at	PRC1	1.57	3.15E-03	5.93E-01	0.55	3.30 15q26.1
36 205631_at	KIAA0586	1.33	2.88E-03	5.93E-01	0.53	3.29 14q22.3
37 226544_x_at	MU	1.49	2.85E-03	5.93E-01	0.52	3.28 6p25.1- p24.3
38 237942_at	SNRK	-1.45	2.51E-03	5.93E-01	-0.50	-3.27 3p21.32
39 225888_at	FLJ13089	1.71	3.78E-03	5.93E-01	0.58	3.26 12q24.13
40 212005_at	DKFZP566C0424	-1.99	2.22E-03	5.93E-01	-0.47	-3.25 1p36.13
41 217213_at		2.04	3.58E-03	5.93E-01	0.55	3.25
42 202648_at	RPS19	-2.18	2.37E-03	5.93E-01	-0.47	-3.22 19q13.2
43 219036_at	BITE	-2.00	2.66E-03	5.93E-01	-0.48	-3.22 3q22-q23
44 238149_at		1.74	3.27E-03	5.93E-01	0.51	3.22
45 203174_s_at	ARFRP1	1.58	2.81E-03	5.93E-01	0.48	3.22 20q13.3
46 231027_at		1.61	2.55E-03	5.93E-01	0.47	3.21
47 219444_at	FLJ11362	1.50	3.56E-03	5.93E-01	0.51	3.20 Xq25-q26.1
48 212740_at	PIK3R4	1.49	3.69E-03	5.93E-01	0.51	3.18 3q22.1
49 236589_at		1.60	3.19E-03	5.93E-01	0.48	3.17
50 238737_at	FLJ32112	2.10	4.82E-03	5.93E-01	0.58	3.17 1p32.3

2.20 Status 2 versus Status 4

#	affy id	HUGO name	fc	p	q	stn i	t Map Location
	1 217526_at		-1.69	2.56E-05	6.08E-02	-1.79	-7.85
	2 201005_at	CD9	-5.57	2.79E-04	8.82E-02	-1.99	-7.69 12p13.3
	3 202648_at	RPS19	-3.77	2.71E-05	6.08E-02	-1.59	-7.16 19q13.2
	4 219833_s_at	FLJ10466	-1.94	2.89E-05	6.08E-02	-1.55	-7.01 6p12.1

5 45297_at	MGC45806	-4.54	1.10E-03	1.48E-01	-1.93	-6.79 1p35.2
6 203227 s_at	SAS	-1.87	2.64E-05	6.08E-02	-1.44	-6.62 12q13.3
7 231896_s_at	DENR	-1.55	1.05E-04	6.71E-02	-1.50	-6.58 12q24.31
8 213359_at		-1.57	1.92E-06	3.57E-02	-1.33	-6.49
9 210425_x_at	GOLGIN-67	-2.41	9.57E-05	6.71E-02	-1.47	-6.49 15q11.2
10 201280 s_at	DAB2	-2.42	6.86E-04	1.18E-01	-1.66	-6.46 5p13
11 211578 s_at	RPS6KB1	2.86	2.30E-06	3.57E-02	1.32	6.43 17q23.2
12 210613 s_at	SYNGR1	3.04	1.09E-05	5.81E-02	1.35	6.42 22q13.1
13 226959_at		-3.53	9.00E-04	1.37E-01	-1.68	-6.39
14 221942_s_at	GUCY1A3	-2.80	5.36E-05	6.65E-02	-1.35	-6.20 4q31.1- q31.2
15 212221_x_at		-2.35	4.12E-04	1.01E-01	-1.46	-6.10
16 36545_s_at	KIAA0542	-1.55	7.02E-06	5.81E-02	-1.22	-5.95 22q12.2
17 210129_s_at	DKFZP434B103	-1.76	9.01E-05	6.71E-02	-1.30	-5.93 3p25.3
18 204895_x_at	MUC4	4.15	1.13E-05	5.81E-02	1.28	5.92 3q29
19 230589_at		-2.68	1.69E-05	5.81E-02	-1.23	-5.91
20 227115_at		-1.83	4.50E-05	6.35E-02	-1.24	-5.84
21 39248_at	AQP3	-3.61	1.82E-03	1.75E-01	-1.60	-5.84 9p13
22 215946_x_at	LOC91316	2.88	1.67E-05	5.81E-02	1.27	5.78 22q11.21
23 222078_at	HCN3	3.06	8.82E-06	5.81E-02	1.18	5.76 1q21.3
24 218983_at	LOC51279	-2.06	1.87E-04	7.46E-02	-1.28	-5.75 12p13.31
25 213317_at		-2.18	1.15E-04	6.71E-02	-1.22	-5.63
26 238886_at		-2.42	2.48E-04	8.18E-02	-1.26	-5.62
27 228476_at	KIAA1407	-2.69	6.16E-04	1.15E-01	-1.31	-5.56 3q13.2
28 219251_s_at	FLJ10300	-2.19	1.45E-05	5.81E-02	-1.13	-5.54 7q36.3
29 213785_at		-2.02	7.22E-04	1.22E-01	-1.32	-5.53
30 222583_s_at	NUP50	2.69	2.59E-05	6.08E-02	1.14	5.52 22q13.31
31 221509_at	DENR	-1.50	1.54E-04	7.06E-02	-1.19	-5.49 12q24.31
32 213048_s_at	SET	-2.02	3.21E-03	1.97E-01	-1.58	-5.44 9q34
33 220974_x_at	BA108L7.2	-2.32	4.64E-04	1.04E-01	-1.25	-5.44 10q24.31
34 212608_s_at		-1.70	2.94E-05	6.08E-02	-1.11	- 5.39
35 202792_s_at	KIAA0685	-1.93	1.15E-04	6.71E-02	-1.15	-5.37 22q13.33
36 207129_at	CA5B	-2.32	1.54E-03	1.69E-01	-1.36	-5.37 Xp21.1
37 222138_s_at	WDR13	-1.86	1.12E-03	1.48E-01	-1.30	-5.35 Xp11.23
38 228331_at	SELH	-1.74	4.21E-05	6.35E-02	-1.10	-5.34
39 206574_s_at	PTP4A3	-3.83	2.85E-03	1.90E-01	-1.48	-5.34
40 200918_s_at	SRPR	1.48	4.04E-05	6.35E-02	1.10	5.32 11q24.3
41 235549_at	LOC255488	9.44	4.16E-05	6.35E-02	1.15	5.32 6p22.3
42 225180_at	FLJ00166	-1.87	2.01E-04	7.74E-02	-1.15	-5.29 3q27.2
43 210248_at	WNT7A	2.69	3.17E-05	6.15E-02	1.09	5.28 3p25
44 220341_s_at	LOC51149	-1.78	1.10E-04	6.71E-02	-1.11	-5.23 5q35.3
45 208978_at	CRIP2	-6.46	4.13E-03	2.06E-01	-1.56	-5.22 14q32.3
46 214675_at	KIAA0169	-2.03	8.18E-05	6.71E-02	-1.09	-5.21 9q34.13
47 224664_at	LOC119504	-1.79	2.06E-03	1.80E-01	-1.33	-5.18 10q22.1
48 202822_at	LPP	-1.66	4.75E-04	1.04E-01	-1.16	-5.16 3q27-q28
49 202371_at	FLJ21174	-1.60	3.73E-05	6.35E-02	-1.05	-5.14 Xq22.1
50 211727_s_at	COX11	-1.66	4.51E-04	1.04E-01	-1.14	-5.12 17q22

2.21 Status 2 versus Status 5

# affy id	HUGO name	fc p		q	stn t	Map
1 206204_at	GRB14	7.18	3.17E-06	9.71E-02	1.41	Location 6.54 2q22-q24
2 214819_at	KIAA0522	3.91	5.10E-06	9.71E-02		5.91 Xp11.22
3 205318_at	KIF5A	1.55	2.23E-05	2.83E-01	1.10	5.44 12q13
4 205666_at	FMO1	3.55	1.19E-04	4.84E-01	1.10	5.06 1q23-q25
5 219736_at	TRIM36	9.02	8.29E-05	4.84E-01	1.05	4.97 5q22.2
6 208007_at	TRIVIOO	3.50	9.90E-05	4.84E-01	0.98	4.79
7 225410_at		1.50	1.27E-04	4.84E-01	0.97	4.73
8 203673_at	TG	2.42	9.94E-05	4.84E-01	0.94	4.70 8q24.2-
0 200010_at	10	6.76	0.04E-00	7.076-01	0.07	q24.3
9 220542_s_at	PLUNC	2.11	1.05E-04	4.84E-01	0.94	4.68 20q11.2
10 211856_x_at	CD28	2.57	1.06E-04	4.84E-01	0.93	4.67 2q33
11 217329_x_at		1.75	6.89E-04	6.06E-01	1.02	4.65
12 215396_at	MASS1	3.75	4.09E-04	6.06E-01	0.98	4.64 5q13
13 233679_at		2.02	5.26E-04	6.06E-01	0.97	4.55
14 216651_s_at	GAD2	3.37	3.63E-04	6.06E-01	0.93	4.49 10p11.23
15 227514_at		1.50	2.55E-04	6.06E-01	0.92	4.44
16 209456_s_at	FBXW1B	1.94	7.22E-04	6.06E-01	0.95	4.43 5q35.1
17 216978_x_at		4.23	3.27E-04	6.06E-01	0.96	4.40
18 210158_at	ERCC4	2.80	2.21E-04	6.06E-01	88.0	4.38 16p13.3- p13.11
19 222765_x_at	C20orf6	1.91	2.37E-04	6.06E-01	0.87	4.35 20p12.1
20 217177_s_at		2.35	2.46E-04	6.06E-01	0.87	4.35
21 210721_s_at	PAK7	4.54	3.59E-04	6.06E-01	0.87	4.25 20p12
22 235549_at	LOC255488	4.25	3.29E-04	6.06E-01	0.85	4.24 6p22.3
23 208061_at	LOC51045	3.78	3.58E-04	6.06E-01	0.86	4.23
24 235187_s_at		3.04	3.79E-04	6.06E-01	0.86	4.22
25 235526_at		3.49	3.83E-04	6.06E-01	0.85	4.20
26 238269_at		2.06	1.63E-03	6.31E-01	0.93	4.19
27 226347_at		1.67	3.79E-04	6.06E-01	0.83	4.16
28 214711_at	15E1.2	2.23	6.52E-04	6.06E-01	0.85	4.16 12q24.31
29 226585_at	NEIL2	-1.89	1.77E-03	6.31E-01	-0.92	-4.15
30 228810_at	FLJ40432	1.59	4.10E-04	6.06E-01	0.83	4.14 2q34
31 239818_x_at		1.84	5.90E-04	6.06E-01	0.84	4.12
32 230982_at		3.52	4.18E-04	6.06E-01	0.82	4.12
33 220405_at	SNTG1	2.54	5.20E-04	6.06E-01	0.83	4.10 8q11-q12
34 212763_at	KIAA1078	1.86	7.65E-04	6.06E-01	0.84	4.10 1q31.3
35 211466_at	NFIB	5.35	6.14E-04	6.06E-01	0.86	4.08 9p24.1
36 206361_at	GPR44	2.15	1.11E-03	6.06E-01	0.85	4.05 11q12- q13.3
37 220776_at	KCNJ14	2.40	2.53E-03	6.40E-01	0.92	4.05 19q13
38 220011_at	MGC2603	1.39	9.77E-04	6.06E-01	0.83	4.03 1p35.3
39 224548_at	HES7	2.18	8.08E-04	6.06E-01	0.82	4.02 17p13.1
40 223648_s_at	FGFRL1	3.00	5.50E-04	6.06E-01	0.80	4.01 4p16
41 213306_at	MPDZ	2.64	5.86E-04	6.06E-01	0.81	4.01 9p24-p22
42 228583_at		1.82	6.54E-04	6.06E-01	0.80	3.99

•	43 220833_at		2.63	7.16E-04	6.06E-01	0.81	3.99
	44 209703_x_at	DKFZP586A0522	1.93	5.81E-04	6.06E-01	0.80	3.99 12q13.12
	45 204337_at		2.37	6.75E-04	6.06E-01	0.79	3.93
	46 215028_at	SEMA6A	3.58	7.15E-04	6.06E-01	0.79	3.92 5q23.1
	47 211039_at	CHRNA1	2.55	8.87E-04	6.06E-01	0.79	3.92 2q24-q32
	48 214668_at	C13orf1	2.88	8.41E-04	6.06E-01	0.81	3.92 13q14
	49 206893_at	SALL1	3.75	9.27E-04	6.06E-01	0.79	3.91 16q12.1
	50 209373_at	BENE	2.93	7.90E-04	6.06E-01	0.79	3.91 2q13

2.22 Status 2 versus normal

# affy id	HUGO name	fc p) C	1 (3	stn t	Map
1 227935_s_at	MGC16202	-1.71	5.98E-07	2.21E-02	-0.66	Location -5.64 10q23.32
2 226196_s_at	MGC16028	2.29	1.00E-05	7.43E-02	0.74	5.42 14q24.2
3 204120_s_at	ADK	1.78	2.96E-05	9.11E-02	0.75	5.16 10cen-g24
4 200014_s_at - HG-U133B	HNRPC	1.30	2.33E-05	8.61E-02	0.66	5.01 14q11.1
5 218409_s_at	DNAJC1	1.65	2.88E-05	9.11E-02	0.64	4.91 10p12.31
6 205372_at	PLAG1	-3.49	6.16E-06	7.43E-02	-0.55	-4.87 8q12
7 220296_at	FLJ11715	-1.90	9.63E-06	7.43E-02	-0.54	-4.79 5q33.2
8 200021_at - HG-U133B	CFL1	-1.16	1.37E-05	7.43E-02	-0.55	-4.76 11q13
9 229963_at		-4.84	1.06E-05	7.43E-02	-0.53	-4.73
10 230341_x_at	ADAMTS10	-1.74	1.41E-05	7.43E-02	-0.52	-4.64 19p13.2
11 203050_at	TP53BP1	1.64	1.29E-04	1.71E-01	0.70	4.62 15q15-q21
12 218643_s_at	CRIPT	1.82	9.19E-05	1.41E-01	0.63	4.60 2p21
13 212151_at		-2.68	1.84E-05	8.49E-02	-0.52	-4.59
14 202972_s_at	FAM13A1	-1.40	2.23E-05	8.61E-02	-0.51	-4.53 4q22.1
15 208426_x_at	KIR2DL4	-1.43	3.48E-05	9.18E-02	-0.52	-4.50 19q13.4
16 214462_at	SOCS4	-1.57	5.36E-05	1.11E-01	-0.54	-4.47 18q22.2
17 224965_at	GNG2	-1.85	3.43E-05	9.18E-02	-0.50	-4.44 14q21
18 209014_at	MAGED1	1.80	2.50E-04	1.77E-01	0.71	4.41 Xp11.23
19 204044_at	QPRT	2.94	2.93E-04	1.89E-01	0.76	4.40 16p12.1
20 214290_s_at	HIST2H2AA	1.59	8.58E-05	1.38E-01	0.54	4.39 1q21.2
21 235463_s_at	LOC253782	1.61	1.76E-04	1.74E-01	0.61	4.39 2q31.1
22 232341_x_at	HABP4	-1.52	4.25E-05	9.80E-02	-0.50	-4.37 9q22.3-q31
23 204141_at	TUBB	-2.82	4.24E-05	9.80E-02	-0.49	-4.35 6p21.3
24 218829_s_at	KIAA1416	-1.91	5.41E-05	1.11E-01	-0.50	-4.33 8q12.1
25 202501_at	MAPRE2	1.57	1.94E-04	1.74E-01	0.59	4.32 18q12.1
26 200029_at - HG-U133B	RPL19	<i>-</i> 1.13	7.79E-05	1.31E-01	-0.50	-4.27 17q11.2- q12
27 204197_s_at	RUNX3	-1.62	6.30E-05	1.22E-01	-0.48	-4.27 1p36
28 236248_x_at		-2.10	6.95E-05	1.28E-01	-0.48	-4.25
29 201279_s_at	DAB2	1.80	1.71E-04	1.74E-01	0.53	4.21 5p13
30 200807_s_at	HSPD1	1.39	2.13E-04	1.74E-01	0.55	4.20 2q33.1
31 205070_at	ING3	-1.37	1.02E-04	1.50E-01	-0.49	-4.20 7q31
32 228003_at		-1.55	7.67E-05	1.31E-01	-0.47	-4.19
33 203162_s_at	KATNB1	1.62	3.27E-04	1.89E-01	0.60	4.18 16q12.2

34 205215_at	RNF2	1.51	1.57E-04	1.74E-01	0.51	4.17 1q25.2	
35 228011_at	LOC137392	3.49	5.24E-04	1.90E-01	0.72	4.15 8q21.3	
36 229971_at	GPR114	1.96	2.92E-04	1.89E-01	0.56	4.13 16q12.2	
37 203830_at	NJMU-R1	1.75	3.73E-04	1.89E-01	0.58	4.10 17q11.2	
38 213804_at	INPP5B	1.43	2.38E-04	1.77E-01	0.52	4.10 1p34	
39 227860_at	CPXM	2.43	5.11E-04	1.90E-01	0.63	4.08 20p12.3-	
						p13	
40 222451_s_at	ZDHHC9	1.95	3.72E-04	1.89E-01	0.56	4.08	}
41 229072_at		-2.52	1.10E-04	1.56E-01	-0.46	-4.08	
42 224617_at	ROD1	1.35	3.31E-04	1.89E-01	0.54	4.07 9q32	
43 235346_at	MGC51029	1.40	2.22E-04	1.74E-01	0.50	4.06 Xp11.3	
44 235556_at		-1.45	1.48E-04	1.74E-01	-0.46	-4.05	
45 210479_s_at	RORA	-2.18	1.30E-04	1.71E-01	-0.45	-4.03 15q21-q22	
46 218395_at	FLJ13433	1.60	4.50E-04	1.90E-01	0.56	4.01 12q23.2	
47 211296_x_at	UBC	-1.13	1.63E-04	1.74E-01	-0.46	-4.01 12q24.3	
48 202862_at	FAH	1.95	6.40E-04	1.91E-01	0.62	3.99 15q23-q25	
49 214697_s_at	ROD1	1.54	4.84E-04	1.90E-01	0.56	3.99 9q32	
50 224618_at	ROD1	1.58	4.28E-04	1.90E-01	0.54	3.99 9q32	

2.23 Status 3 versus Status 4

#	affy id	HUGO name	fc p) q	ī	stn t	Map Location
•	1 36545_s_at	KIAA0542	-1.58	7.51E-07	4.75E-03	-1.49	-8.09 22q12.2
	2 222753_s_at	FLJ22649	1.96	4.09E-08	1.51E-03	1.23	7.17 4q34.2
	3 212608_s_at		-1.60	4.09E-05	3.52E-02	-1.36	-6.91
4	4 221387_at	OT7T022	2.38	9.83E-08	1.82E-03	1.18	6.89 10q21-q22
	5 239652_at		2.67	2.51E-07	2.32E-03	1.17	6.76
(6 227227_at		-1.84	2.44E-05	3.20E-02	-1.27	-6.69
	7 216117_at		2.99	2.29E-07	2.32E-03	1.16	6.63
8	3 238109_at		-1.91	7.71E-07	4.75E-03	-1.10	-6.35
9	9 45297_at	MGC45806	-3.80	1.08E-03	1.25E-01	-1.50	-6.24 1p35.2
10	0 219251_s_at	FLJ10300	-1.89	2.92E-06	1.08E-02	-1.10	-6.23 7q36.3
1	1 228331_at	SELH	-1.79	1.14E-05	2.18E-02	-1.12	-6.18
1:	2 244712_at		-2.45	2.35E-04	6.63E-02	-1.26	-6.14
1:	3 225180_at	FLJ00166	-1.89	2.74E-04	7.14E-02	-1.25	-6.08 3q27.2
14	4 219595_at	ZNF26	-1.33	1.16E-06	6.15E-03	-1.04	-6.01 12q24.33
1:	5 229923_at		-1.52	3.25E-04	7.56E-02	-1.20	-5.86
1	6 238346_s_at	NCOA6IP	1.58	1.92E-06	8.47E-03	1.00	5.83 8q11
1	7 230591_at		3.74	2.06E-06	8.47E-03	1.00	5.81
1	8 206607_at	CBL	1.98	8.65E-06	1.98E-02	1.03	5.80 11q23.3
1	9 217526_at		-1.48	8.16E-05	4.84E-02	-1.08	-5.73
2	0 220341_s_at	LOC51149	-1.89	3.87E-05	3.49E-02	-1.05	-5.72 5q35.3
2	1 220390_at	FLJ23598	-1.65	1.44E-04	5.86E-02	-1.09	-5.67 11p11.12
2	2 213851_at		2.38	3.81E-06	1.19E-02	0.97	5.66
2	3 221686_s_at	RECQL5	-1.76	1.15E-04	5.33E-02	-1.08	-5.65 17q25.2- q25.3
2	4 207707_s_at	SEC13L1	1.50	3.38E-05	3.21E-02	1.02	5.62 3p25-p24

25 219833_s_at	FLJ10466	-1.67	1.08E-04	5.32E-02	-1.06	-5.61 6p12.1
26 232901_at	LOC57038	3.15	3.86E-06	1.19E-02	0.96	5.58 6q16.1
27 201280_s_at	DAB2	-2.05	1.22E-03	1.31E-01	-1.25	-5.55 5p13
28 221942_s_at	GUCY1A3	-2.43	9.17E-05	5.14E-02	-1.04	-5.55 4q31.1-
						q31.2
29 226959_at		-2.72	1.42E-03	1.39E-01	-1.26	-5.53
30 243886_at		-2.01	6.14E-05	4.37E-02	-1.01	-5.51
31 242491_at	SMA5	-1.61	4.01E-04	8.47E-02	-1.11	-5.50 5q13
32 230589_at		-2.10	6.38E-05	4.38E-02	-1.00	-5.46
33 228817_at		-1.38	9.10E-06	1.98E-02	-0.94	-5.44
34 217323_at	HLA-DRB6	3.18	2.72E-05	3.20E-02	0.96	5.40 6p21.3
35 238106_at		2.77	7.09E-06	1.98E-02	0.92	5.37
36 231896_s_at	DENR	-1.42	3.38E-04	7.56E-02	-1.05	-5.33 12q24.31
37 202885_s_at	PPP2R1B	3.36	8.75E-06	1.98E-02	0.91	5.31 11q23
38 212221_x_at		-1.86	2.38E-03	1.73E-01	-1.28	-5.30
39 200084_at -	SMAP	-1.39	1.95E-04	6.20E-02	-1.01	-5.29 11p15.1
HG-U133B						
40 222244_s_at	FLJ20618	-1.36	1.00E-04	5.20E-02	-0.97	-5.28 22q12.2
41 204939_s_at	PLN	3.40	8.75E-06	1.98E-02	0.91	5.28 6q22.1
42 217346_at		1.68	1.07E-04	5.32E-02	0.98	5.28
43 236695_at		2.88	9.95E-06	2.05E-02	0.90	5.27
44 235195_at		-1.78	9.10E-04	1.13E-01	-1.11	-5.27
45 219964_at	ST7L	-1.78	2.71E-05	3.20E-02	-0.92	-5.24 1p13.1
46 238588_at		-1.77	1.76E-04	6.09E-02	-0.98	-5.23
47 223716_s_at	ZNF265	-1.64	6.12E-04	1.03E-01	-1.06	-5.23 1p31
48 201005_at	CD9	-2.62	6.10E-04	1.03E-01	-1.06	-5.22 12p13.3
49 220530_at		4.48	1.18E-05	2.18E-02	0.90	5.21
50 217239_x_at		5.80	1.53E-05	2.65E-02	0.94	5.21

2.24 Status 3 versus Status 5

# affy id	HUGO name	fc	o ·	q	stn	t Map Location
1 243322_at		4.13	6.00E-07	2.19E-02	1.08	6.32
2 222461_s_at	HERC2	2.96	3.60E-06	2.31E-02	1.03	5.96 15q13
3 238067_at	FLJ20298	16.08	1.93E-06	2.19E-02	1.06	5.95 Xq22.2
4 215732_s_at	DTX2	2.18	1.18E-05	4.81E-02	1.04	5.87 7q11.23
5 206294_at	HSD3B2	3.33	1.85E-06	2.19E-02	0.98	5.78 1p13.1
6 215323_at		2.64	1.95E-06	2.19E-02	0.97	5.76
7 208801_at	SRP72	-1.16	2.71E-06	2.31E-02	-0.96	-5.65 4q11
8 230982_at		3.38	2.27E-05	5.89E-02	1.01	5.63
9 244854_at		3.35	3.70E-06	2.31E-02	0.94	5.57
10 244858_at		3.24	4.52E-06	2.31E-02	0.94	5.52 ·
11 240691_at		4.46	4.62E-06	2.31E-02	0.94	5.50
12 231010_at	PRO0971	1.64	7.35E-06	3.30E-02	0.94	5.49 4q25
13 218489_s_at	ALAD	-2.71	2.03E-04	1.55E-01	-1.07	-5.46 9q34
14 206936_x_at	NDUFC2	1.55	1.60E-05	5.59E-02	0.92	5.34 11q13.3
15 207834_at	FBLN1	2.65	1.62E-05	5.59E-02	0.89	5.21 22q13.31

						•	•
16 22908	7_s_at	FLJ14775	2.52	7.87E-05	1.18E-01	0.93	5.17 17q25.1
17 21973	6_at	TRIM36	6.95	1.84E-05	5.89E-02	0.87	5.05 5q22.2
18 23339	5_at		1.46	2.46E-05	5.89E-02	0.86	5.03
19 21812	1_at	HMOX2	1.76	1.87E-04	1.55E-01	0.93	5.01 16p13.3
20 24469	2_at	FLJ39501	3.69	2.30E-05	5.89E-02	0.85	5.00 19p13.11
21 20345	3_at	SCNN1A	2.77	2.09E-05	5.89E-02	0.85	4.99 12p13
22 21466	8_at	C13orf1	2.41	2.49E-05	5.89E-02	0.83	4.90 13q14
23 23098	7_at		2.09	1.88E-04	1.55E-01	0.89	4.88
24 23984	9_at		3.52	5.30E-05	9.52E-02	0.84	4.86
25 20615	9_at	GDF10	2.65	4.44E-05	8.46E-02	0.83	4.86 10q11.21
26 21440	8_s_at	RFPL3S	1.83	2.96E-04	1.85E-01	0.91	4.85 22q12.3
27 24315	5_at		3.36	3.43E-05	7.55E-02	0.82	4.80
28 23107	3_at		2.35	3.53E-05	7.55E-02	0.81	4.78
29 21665	1_s_at	GAD2	3.27	3.78E-04	2.17E-01	0.90	4.78 10p11.23
30 21527	0_at	LFNG	3.27	4.17E-05	8.46E-02	0.81	4.76 7p22
31 23518	7_s_at		2.74	4.52E-05	8.46E-02	0.79	4.70
32 22895	0_s_at	FLJ23091	3.13	6.25E-05	1.04E-01	0.81	4.65 1p31.2
33 21489	3_x_at	HCN2	2.86	6.50E-05	1.04E-01	0.80	4.63 19p13.3
34 21113	2_at	FLJ21919	2.49	5.54E-05	9.57E-02	0.78	4.63 1q21.3
35 21580	2_at		3.33	1.05E-04	1.38E-01	0.79	4.59
36 20831	4_at	RRH	1.57	1.97E-04	1.55E-01	0.81	4.58 4q25
37 23893	3_at	IRS1	3.02	7.72E-05	1.18E-01	08.0	4.58 2q36
38 24381	2_at	RABL4	2.14	1.94E-04	1.55E-01	0.81	4.56 22q13.1
39 23071	7_at		2.95	2.31E-04	1.62E-01	0.81	4.53
40 24148	89_at		2.21	8.25E-04	2.76E-01	0.88	4.52
41 24383	89_s_at		1.91	2.17E-04	1.60E-01	0.80	4.52
42 23484	l0_s_at	OR5V1	2.27	8.98E-05	1.30E-01	0.76	4.48 6p21.32
43 21502	28_at	SEMA6A	2.81	1.61E-04	1.50E-01	0.77	4.45 5q23.1
44 23687	'0_at		2.94	9.50E-05	1.33E-01	0.75	4.44
45 20937	′3_at	BENE	3.04	1.83E-04	1.55E-01	0.77	4.43 2q13
46 20433	37_at		2.66	1.05E-04	1.38E-01	0.75	4.42
47 24358	35_at		2.13	1.24E-04	1.39E-01	0.75	4.42
48 20795	52_at	IL5	3.08	1.07E-04	1.38E-01	0.74	4.40 5q31.1
49 21979	93_at	SNX16	1.65	7.25E-04	2.63E-01	0.83	4.40 8q21.12
50 21482	23_at	ZNF204	1.84	1.27E-04	1.39E-01	0.75	4.39 6p21.3

2.25 Status 3 versus normal

#	affy id	HUGO name	fc	р	q	stn	t Map Location
	1 214698_at	ROD1	1.95	8.94E-09	1.91E-04	0.84	7.08 9q32
	2 214697_s_at	ROD1	1.66	2.12E-07	3.49E-04	0.70	6.04 9q32
	3 203124_s_at	SLC11A2	-2.27	3.71E-08	2.44E-04	-0.64	-6.04 12q13
	4 234863_x_at	FBXO5	-2.17	4.37E-08	2.44E-04	-0.63	-6.00 6q25-q26
	5 217683_at		-3.37	4.55E-08	2.44E-04	-0.63	-5.99
	6 209458_x_at	HBA1	-1.80	1.03E-07	3.14E-04	-0.64	-5.90 16p13.3
	7 211745 x at	HBA2	-1.75	9.82E-08	3.14E-04	-0.63	-5.89 16p13.3

			13			
8 237336_at	ADD2	-2.43	7.73E-08	3.14E-04	-0.62	-5.87 2p14-p13
9 211396_at	FCGR2B	-3.32	1.52E-07	3.46E-04	-0.66	-5.86 1q23
10 229610_at	FLJ40629	-2.15	1.24E-07	3.33E-04	-0.61	-5.78 2q13
11 211699_x_at	HBA1	-1.82	1.62E-07	3.46E-04	-0.61	-5.75 16p13.3
12 56748_at	TRIM10	-1.90	1.78E-07	3.47E-04	-0.61	-5.71 6p21.3
13 203891_s_at	DAPK3	1.75	4.53E-07	4.41E-04	0.64	5.69 19p13.3
14 218726_at	DKFZp762E1312	-2.59	2.64E-07	3.62E-04	-0.61	-5.66 2q37.1
15 206834_at	HBD	-2.44	1.95E-07	3.49E-04	-0.60	-5.65 11p15.5
16 203581_at	RAB4A	1.57	1.24E-06	7.20E-04	0.68	5.63 1q42-q43
17 221509_at	DENR	1.51	1.21E-06	7.20E-04	0.67	5.63 12q24.31
18 209301_at	CA2	-3.06	2.94E-07	3.64E-04	-0.60	-5.61 8q22
19 203214_x_at	CDC2	-2.11	3.06E-07	3.64E-04	-0.60	-5.59 10q21.1
20 206574_s_at	PTP4A3	4.97	4.56E-06	1.11E-03	0.84	5.59
21 227309_at		-2.04	2.70E-07	3.62E-04	-0.59	-5.59
22 204018_x_at	HBA1	-1.70	3.80E-07	4.07E-04	-0.60	-5.59 16p13.3
23 226944_at	HTRA3	-2.04	2.66E-07	3.62E-04	-0.59	-5.58 4p16.1
24 213800_at	HF1	4.91	4.54E-06	1.11E-03	0.81	5.56 1q32
25 202043_s_at	SMS	1.55	1.39E-06	7.27E-04	0.66	5.56 Xp22.1
26 231274_s_at	MSCP	-2.57	3.57E-07	4.03E-04	-0.60	-5.56 8p21.2
27 202701_at	BMP1	1.61	1.06E-06	7.09E-04	0.64	5.55 8p21
28 239327_at		-4.20	5.37E-07	5.00E-04	-0.61	-5.52
29 207252_at	INE1	-2.14	4.15E-07	4.23E-04	-0.58	-5.48 Xp11.4-
20.74604	ED 4	4 57	2 405 00	0.00=.04	0.05	p11.3
30 74694_s_at	FRA	1.57	2.49E-06	8.90E-04	0.65	5.44 16p12.1
31 205592_at	SLC4A1	-5.93	7.78E-07	6.44E-04	-0.60	-5.43 17q21-q22
32 214414_x_at	HBA1	-1.50	8.84E-07	7.01E-04	-0.59	-5.40 16p13.3
33 209392_at	ENPP2	4.70	8.31E-06	1.37E-03	0.80	5.37 8q24.1
34 217010_s_at	CDC25C	-1.99 7.20	7.81E-07 1.08E-06	6.44E-04	-0.57	-5.37 5q31
35 208416_s_at	SPTB	-7.29	1.000-00	7.09E-04	-0.60	-5.36 14q23- q24.2
36 203123_s_at	SLC11A2	-1.59	7.06E-07	6.30E-04	-0.56	-5.34 12q13
37 217232_x_at	HBB	-1.59	1.53E-06	7.79E-04	-0.59	-5.33 11p15.5
38 224587_at	PC4	1.51	3.07E-06	9.54E-04	0.62	5.31 5p13.3
39 204419_x_at	· HBG2	-2.94	9.58E-07	7.09E-04	-0.56	-5.27 11p15.5
40 210559_s_at	CDC2	-2.23	1.12E-06	7.09E-04	-0.56	-5.27 10q21.1
41 210384_at	HRMT1L1	-2.28	1.01E-06	7.09E-04	-0.55	-5.26 21q22.3
42 209116_x_at	HBB	-1.63	2.02E-06	8.53E-04	-0.58	-5.26 11p15.5
43 213515_x_at	HBG1	-2.82	1.03E-06	7.09E-04	-0.55	-5.25 11p15.5
44 220886_at	GABRQ	-1.48	1.17E-06	7.17E-04	-0.55	-5.24 Xq28
45 205678_at	AP3B2	-1.72	1.12E-06	7.09E-04	-0.55	-5.23 15q
46 218188_s_at	TIMM13	1.81	8.01E-06	1.37E-03	0.67	5.21 19p13.3
47 211819_s_at	SORBS1	-1.69	1.34E-06	7.23E-04	-0.55	-5.20 10q23.3-
40 045450 -4	DD00007	4 07	4 000 00	7.000.04	0.55	q24.1
48 215150_at	PRO0907	-1.67	1.32E-06	7.23E-04	-0.55	-5.19 1q32.1
49 234742_at	SIRPB2	-2.20	1.35E-06	7.23E-04	-0.55	. ヘコロンロハイス
50 203897_at	LOC57149	2.01	1.17E-05	1.73E-03	0.72	-5.19 20p13 5.18 16p11.2

# affy id	HUGO name	fc p) (4	stn t	Map Location
1 206936_x_at	NDUFC2	1.92	3.20E-05	8.13E-01	2.70	8.76 11q13.3
2 201005_at	CD9	8.14	1.94E-04	8.27E-01	2.62	8.11 12p13.3
3 223848_at		3.11	5.45E-05	8.13E-01	2.47	7.98
4 218489_s_at	ALAD	-4.76	1.18E-04	8.27E-01	-2.37	-7.55 9q34
5 203950_s_at	CLCN6	1.88	6.16E-05	8.13E-01	2.19	7.21 1p36
6 243866_x_at		3.19	1.09E-04	8.27E-01	2.13	6.99
7 205081_at	CRIP1	3.05	1.30E-04	8.27E-01	1.99	6.56 7q11.23
8 39248_at	AQP3	4.84	1.08E-03	8.27E-01	2.09	6.30 9p13
9 208978_at	CRIP2	17.82	3.61E-03	8.27E-01	2.48	6.04 14q32.3
10 224619_at	LOC113201	2.30	6.24E-04	8.27E-01	1.86	5.94 15q14
11 210757_x_at	DAB2	2.40	5.46E-04	8.27E-01	1.83	5.88 5p13
12 45297_at	MGC45806	4.48	5.02E-04	8.27E-01	1.80	5.84 1p35.2
13 206574_s_at	PTP4A3	5.86	1.30E-03	8.27E-01	1.86	5.73
14 230601_s_at	MGC16309	1.74	3.11E-04	8.27E-01	1.73	5.72 17q21.32
15 228817_at		1.57	8.27E-04	8.27E-01	1.80	5.67
16 231100_at	RRAD	-2.43	4.09E-04	8.27E-01	-1.71	-5.62 16q22
17 230434_at	MGC22679	1.83	8.84E-04	8.27E-01	1.75	5.58 2q31.1
18 201494_at	PRCP	1.63	4.90E-04	8.27E-01	1.69	5.56 11q14
19 237240_at		1.74	6.01E-04	8.27E-01	1.71	5.54
20 204073_s_at	C11orf9	3.07	4.04E-04	8.27E-01	1.66	5.50 11q12- q13.1
21 202111_at	SLC4A2	4.55	1.84E-03	8.27E-01	1.79	5.47 7q35-q36
22 209373_at	BENE	4.40	1.58E-03	8.27E-01	1.75	5.44 2q13
23 208120_x_at		1.68	2.88E-03	8.27E-01	1.83	5.38
24 206204_at	GRB14	6.16	5.28E-03	8.27E-01	2.11	5.36 2q22-q24
25 211856_x_at	CD28	3.41	2.71E-03	8.27E-01	1.80	5.35 2q33
26 202944_at	NAGA	2.06	1.53E-03	8.27E-01	1.70	5.33 22q13-qter
27 217526_at		1.58	5.18E-04	8.27E-01	1.61	5.32
28 240321_at		2.73	2.51E-03	8.27E-01		5.28
29 204446_s_at	ALOX5	3.79	1.12E-03	8.27E-01		5.27 10q11.2
30 213317_at		2.31	5.40E-04	8.27E-01		5.24
31 210123_s_at	CHRNA7	1.98	9.00E-04	8.27E-01		5.20 15q14
32 223637_s_at	DKFZP566M1046		3.18E-03	8.27E-01		5.13 11p15.4
33 221659_s_at	LOC93408	-1.75	3.27E-03	8.27E-01		-5.06 7q22.1
34 227032_at	FLJ30634	2.28	8.60E-04	8.27E-01		5.05 1q32.1
35 212921_at	HSKM-B	1.69	8.14E-04	8.27E-01		5.05 1q32.3
36 222138_s_at	WDR13	1.99	8.81E-04	8.27E-01		4.99 Xp11.23
37 222976_s_at	TPM3	1.22	1.03E-03	8.27E-01		4.97 1q21.2
38 235087_at	UNKL	-6.35	3.70E-03	8.27E-01		-4.95 16p13.3
39 209561_at	THBS3	1.93	2.93E-03	8.27E-01		4.93 1q21
40 201280_s_at	DAB2	2.49	8.15E-04	8.27E-01	•	4.93 5p13
41 205160_at	PEX11A	1.96	1.08E-03	8.27E-01		4.93 15q25.3
42 200811_at	CIRBP	1.49	8.54E-04	8.27E-01		4.90 19p13.3
43 209695_at	PTP4A3	2.45	1.19E-03	8.27E-01		4.88
44 220974_x_at	BA108L7.2	2.36	9.31E-04	8.27E-01		4.88 10q24.31
45 201430_s_at	DPYSL3	3.30	3.56E-03	8.27E-01	1.61	4.88 5q32

2.27 Status 4 versus normal

# affy id	HUGO name	fc	0	q	stn t	
1 202371_at	FLJ21174	2.24	1.23E-08	3.35E-06	1.88	Location 12.92 Xq22.1
2 219251_s_at	FLJ10300	3.11	1.11E-06			12.64 7q36.3
3 201242_s_at	ATP1B1	2.84	2.98E-09			11.97 1q22-q25
4 201022_s_at	DSTN	1.85	1.15E-07			11.81 20p11.23
5 201536 at	DUSP3	1.87	1.84E-15			10.96 17q21
6 220761_s_at	JIK	1.78	4.99E-11	1.13E-07		10.76 12g
7 222753 s_at	FLJ22649	-2.14	2.51E-13			-10.51 4q34.2
8 203227_s_at	SAS	2.54	2.50E-05	7.09E-04	1.82	10.33 12q13.3
9 221005_s_at	PTDSS2	2.29	6.36E-07	5.49E-05	1.51	10.10 11p15
10 231896_s_at	DENR	1.94	5.41E-05	1.23E-03	1.84	9.96 12q24.31
11 221509_at	DENR	1.98	6.13E-05	1.35E-03	1.86	9.95 12q24.31
12 221942_s_at	GUCY1A3	5.10	1.85E-04	2.98E-03	2.15	9.93 4q31.1- q31.2
13 238109_at		2.67	3.10E-10	4.08E-07	1.26	9.64
14 216117_at		-3.38	4.80E-14	6.00E-10	-1.18	-9.62
15 210425_x_at	GOLGIN-67	3.51	2.06E-04	3.24E-03	1.97	9.39 15q11.2
16 212608_s_at		1.83	4.51E-05	1.08E-03	1.64	9.34
17 36545_s_at	KIAA0542	1.74	4.97E-08	9.93E-06	1.28	9.24 22q12.2
18 204756_at	MAP2K5	1.87	3.62E-06	1.88E-04	1.40	9.14 15q22.2
19 219833_s_at	FLJ10466	2.21	5.50E-05	1.24E-03	1.60	9.10 6p12.1
20 203807_x_at	CSH2	-2.13	7.84E-11	1.51E-07	-1.15	-9.00 17q24.2
21 214344_at	LOC92973	-6.45	7.05E-13	4.41E-09	-1.12	-9.00 9p13.1
22 220044_x_at	LUC7A	2.05	3.52E-05	9.04E-04	1.51	8.92 17q21
23 200631_s_at	SET	1.38	5.23E-06	2.38E-04	1.36	8.87 9q34
24 211727_s_at	COX11	2.28	3.29E-04	_		8.79 17q22
25 219964_at	ST7L	2.36	8.73E-07	6.78E-05	1.27	8.77 1p13.1
26 220341_s_at	LOC51149	2.52	1.30E-05	4.62E-04		8.74 5q35.3
27 218983_at	LOC51279	2.78	2.96E-04	`		8.64 12p13.31
28 200084_at - HG-U133B	SMAP	1.64	4.52E-05			8.53 11p15.1
29 221671_x_at	IGKC	-6.22	5.10E-12	_		-8.51 2p12
30 216656_at			4.43E-12			-8.50
31 225178_at	FLJ00166	2.16	9.53E-08	_		8.48 3q27.2
32 221651_x_at	IGKC	-5.79	1.11E-11	3.97E-08	-1.05	-8.45 2p12
33 227227_at		2.15	8.62E-06			8.30
34 242810_x_at		-5.26	2.72E-11	6.80E-08		-8.26
35 215943_at	KIAA1661	-4.50	1.28E-11		-1.01	-8.24
36 214677_x_at	IGLJ3	-8.00	1.49E-11	4.13E-08	-1.01	-8.19 22q11.1- q11.2

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37 225180_at	FLJ00166	2.37	2.17E-04	3.37E-03	1.55	8.17 3q27.2
38 204909_at	DDX6	-1.78	9.30E-10	8.61E-07	-1.03	-8.08 11q23.3
39 213359_at		1.53	1.47E-07	2.03E-05	1.09	8.04
40 217157_x_at	IGKC	-5.81	7.60E-11	1.51E-07	-1.00	-8.02 2p12
41 211302_s_at	PDE4B	-3.40	1.24E-10	2.20E-07	-1.00	-7.99 1p31
42 214698_at	ROD1	2.00	9.75E-05	1.88E-03	1.38	7.99 9q32
43 205896_at	SLC22A4	-3.04	2.18E-09	1.24E-06	-1.02	-7.96 5q31.1
44 201280_s_at	DAB2	3.14	6.44E-04	7.29E-03	1.81	7.95 5p13
45 225227_at		-4.18	1.32E-10	2.20E-07	-0.97	-7.84
46 235391_at	LOC137392	3.14	5.07E-04	6.13E-03	1.66	7.83 8q21.3
47 215733_x_at	CTAG2	-1.84	1.66E-10	2.60E-07	-0.96	-7.76 Xq28
48 204341_at	TRIM16	2.83	9.76E-04	9.86E-03	1.98	7.75 17p11.2
49 204073_s_at	C11orf9	3.35	7.97E-04	8.57E-03	1.79	7.69 11q12-
50 221765_at	UGCG	-4.38	5.48E-09	1.96E-06	-0.99	q13.1 -7.69 9q31

2.28 Status 5 versus normal

#	affy id	HUGO name	fc	p	q	stn t	: Map
	1 219065_s_at	CGI-27	1.41	7.97E-14	3 30E 00	4.00	Location
	2 243322_at	001-27	-4.34	,			9.92 2p23.1
	3 207052_at	HAVCR1	-3.03		•		-9.04 9.70 5-00 0
	4 206159_at	GDF10	-3.59				-8.78 5q33.2
	5 226464_at	MGC33365	-3.3 9 -2.42				-8.21 10q11.21
	6 203673_at	TG					-8.14 3q24
	0 2030/3_at	16	-2.52	2.396-07	1.46E-04	-1.11	-8.01 8q24.2- q24.3
	7 243010_at	MSI2	1.88	3.87E-07	1.90E-04	1.10	7.87 17q23.1
	8 204337_at		-3.50	1.81E-09	7.76E-06	-0.96	-7.64
	9 220542_s_at	PLUNC	-2.37	3.57E-08	4.75E-05	-0.97	-7.45 20q11.2
	10 229894_s_at	KIAA1160	-1.94	1.10E-09	7.76E-06	-0.89	-7.26 3g21.3
	11 208007_at		-3.82	1.07E-09	7.76E-06	-0.89	-7.24
	12 205879_x_at	RET	-2.16	2.14E-08	3.91E-05	-0.92	-7.20 10q11.2
	13 208801_at	SRP72	1.22	1.63E-09	7.76E-06	0.87	7.09 4q11
	14 214668_at	C13orf1	-2.98	2.87E-09	1.01E-05	-0.88	-7.08 13q14
	15 214981_at		-6.47	1.44E-09	7.76E-06	-0.86	-7.05
	16 216661_x_at	CYP2C9	-1.93	1.53E-09	7.76E-06	-0.86	-7.05 10q24
	17 244692_at	FLJ39501	-5.04	5.81E-09	1.24E-05	-0.88	-7.04 19p13.11
	18 226140_s_at		-2.67	1.03E-07	8.31E-05	-0.91	-6.98
	19 204687_at	DKFZP564O0823	-1.75	1.27E-07	9.53E-05	-0.91	-6.97 4q13.3- q21.3
	20 202008_s_at	NID	-2.60	4.54E-09	1.13E-05	-0.86	-6.95 1q43
	21 239286_at		-3.91	3.51E-07	1.83E-04	-0.91	-6.89
	22 219504_s_at	FLJ13150	1.92	3.54E-07	1.83E-04	0.91	6.88 1p22.1
	23 231380_at	VEST1	-5.03	3.41E-09	1.02E-05	-0.84	-6.85 8q13
	24 201074_at	SMARCC1	1.34	8.59E-08	7.81E-05	0.87	6.80 3p23-p21
	25 231981_at		-2.24	5.97E-08	6.92E-05	-0.87	-6.79
	26 206204_at	GRB14	-5.37	4.97E-09	1.15E-05	-0.83	-6.76 2q22-q24
	27 209535_s_at	AKAP13	-2.15	1.27E-06	3.52E-04	-0.92	-6.75 15q24-q25
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28 201664_at	SMC4L1	1.71	5.72E-05	3.71E-03	1.06	6.69 3q26.1
29 221370_at	ZNF73	-2.98	3.25E-06	6.45E-04	-0.93	-6.67 22p
30 233836_at		-2.84	8.63E-09	1.73E-05	-0.81	-6.62
31 227948_at	FRABIN	-3.00	2.43E-07	1.46E-04	-0.85	-6.58 12p11.1
32 241821_at	, 10 (2)	-2.29	2.49E-07	1.46E-04	-0.85	-6.57
33 223750_s_at	TLR10	-3.30	8.34E-08	7.81E-05	-0.82	-6.51 4p14
34 216231_s_at	B2M	-1.17	7.42E-08	7.68E-05	-0.82	-6.49 15q21- q22.2
35 239567_at		-3.85	2.15E-07	1.42E-04	-0.82	-6.44
36 230982_at		-3.68	3.26E-06	6.45E-04	-0.88	-6.43
37 206294_at	HSD3B2	-2.83	1.38E-07	1.01E-04	-0.81	-6.41 1p13.1
38 215086_at	IBTK	-7.05	2.72E-08	4.30E-05	-0.78	-6.34 6q14.3
39 210115_at	RPL39L	-5.24	2.55E-08	4.26E-05	-0.77	-6.33 _. 3q27
40 231073_at	(1, 2002	-2.64	3.64E-08	4.75E-05	-0.78	-6.33
41 240016_at		-2.83	3.45E-07	1.83E-04	-0.81	-6.32
41 2400 TO_at 42 244854_at		-4.22	3.49E-08	4.75E-05	-0.77	-6.30
42 244654_at	CRYBA4	-2.86	1.12E-07	8.62E-05	-0.79	-6.30 22q12.1
43 200043_at 44 207952_at	IL5	-3.52	7.68E-08	7.68E-05	-0.78	-6.26 5q31.1
44 207932_at 45 243132_at		-3.52	3.59E-08	4.75E-05	-0.77	-6.26
46 204762_s_at	GNAO1	-1.81	2.64E-07	1.49E-04	-0.79	-6.25 16q13
46 204762_s_at 47 209948_at	KCNMB1	-1.80	2.45E-06	5.45E-04	-0.83	-6.23 5q34
	HLA-C	-1.21	1.05E-07	8.31E-05	-0.78	-6.23 6p21.3
48 208812_x_at 49 218329_at	PRDM4	-1.67	1.04E-07	8.31E-05	-0.77	-6.22 12q23- q24.1
50 41397_at	LOC55565	-2.90	4.74E-07	2.05E-04	-0.80	-6.21 16q22.1